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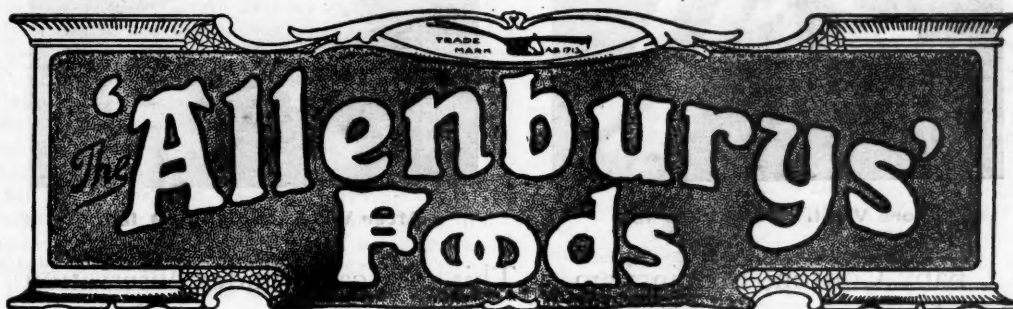
With which "The Australasian Medical Gazette," and "The Australian Medical Journal" are incorporated.)

The Journal of the Australian Branches of the British Medical Association.

VOL. II.—3RD YEAR—No. 17.

SYDNEY: SATURDAY, OCTOBER 21, 1916.

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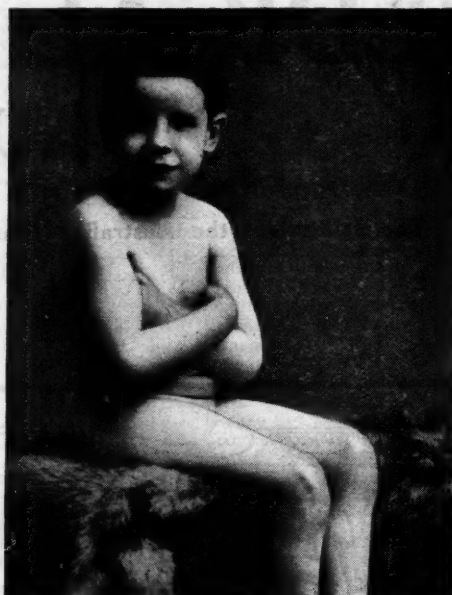
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CASE VII.



Before Virol. Weight 28 lbs.



After Virol. Weight 49 lbs.

Baby Colston, Birmingham. This case came under observation 1st March, 1912, with a history of wasting and severe arthritis, extending over six months. Examination showed him to be extremely emaciated, weighing 28 lbs. instead of a normal $44\frac{1}{2}$ lbs. He was extremely anæmic and had alternately constipation and diarrhœa. He was given one teaspoonful of Virol three times a day with milk diet. Improvement was immediate and marked, with speedy and continuous addition of weight. By the middle of May his condition had so improved that he was able to walk with very little help. At the end of August his weight had increased to 49 lbs. The photographs were taken the 12th March and the 13th June, 1912.

A Preparation of Bone Marrow, Red Bone Marrow, Malt Extract Lemon Syrup, &c.

A Valuable Food in all Wasting Conditions.

VIROL

THE MEDICAL JOURNAL OF AUSTRALIA.

VOL. II.—3RD YEAR.

SYDNEY: OCTOBER 21, 1916.

No. 17.

STARVATION AND DIET IN DIABETES.¹

By John F. Wilkinson, M.D.,
Physician, Melbourne Hospital.

In February, 1914, a youth, 17 years of age, came to see me. He walked into my room, licking his lips, looking very thin and wasted, obviously very weak, and it needed very little clinical acumen to make a spot diagnosis of diabetes. So it proved to be. He had been under treatment with a rigid diet, thoroughly well carried out by his mother, who was with him. He had taken considerable quantities of codeine. His weight had diminished to 8 st. 7 lbs.; he was passing 3,500 c.cm. of urine, containing 5% of sugar, was very thirsty and was going downhill rapidly. It did not look a very promising sort of case; but I had been reading Guelpa's book on "Fasting in Diabetes," and, I must confess, with some trepidation, suggested to his people that it should be tried. The result was astounding. I last saw him three months ago, when he said he had never felt better, was doing a full day's work carting sand for his father, and was still carrying out the treatment, with an occasional fast, which gave him no trouble. I have no doubt he is still keeping well, or I should have heard from him. What is the treatment that could accomplish such a result?

Guelpa, in 1910, read a paper "Starvation and Purgation in the Relief of Disease," in which he showed that patients suffering from many metabolic diseases could be greatly benefitted by such means, and especially that diabetics could, in a great many cases, be made sugar-free with startling rapidity.

His routine is:—

(1) To give the patient each day for two, three or four days a full bottle of *Hunyadi János* water, or other similar water (I have used Felton, Grimwade's B.S.A.), given hot in the early morning, or from $1\frac{1}{4}$ to $1\frac{3}{4}$ ounces of castor oil, followed by a pint and a half of water.

(2) To require him to abstain during this time from all food.

(3) To get him to drink freely of water, weak tea without milk or sugar, and apple infusion.

(4) For the first experiment the patient is put to bed and kept under close observation.

The immediate effects of this treatment may be set out as—

(1) Entire disappearance of any painful or uncomfortable sensation of hunger.

(2) Extraordinary diminution in the number of bacteria present in the intestines, and thus an ideal disinfection of the digestive canal.

(3) Marked diminution of thirst and great diminution of the quantity of urine passed.

(4) Suppression or marked diminution of perspiration,

even in hot weather.

(5) Appearance of regular and refreshing sleep.

(6) Steadying of the pulse and lowering of the blood-pressure.

(7) Steady loss of weight as a rule; but I have more than once seen definite increase in weight during the fast.

(8) Complete disappearance of sugar from the urine. The longest fast I have had to adopt to secure this has been five days—in a very emaciated patient with typical diabetes of long standing.

After the fast, Guelpa allows simple foods, as eggs, a little milk, and vegetables, for two days, and gradually works up to a full diabetic diet. He admits that the sugar may return; but says it will not return in such large quantity, and a second fasting period will remove it more rapidly. He adds that, in a large percentage of cases, cure will ultimately result. He has used the treatment in many other conditions, and reports remarkable results in his book; but time does not permit me to digress for the discussion of these. Suffice it to say that, in a stout, breathless, emphysematous man, the relief I obtained was so striking that he decided to treat himself again from time to time.

Such is a bare outline of the treatment, which, with some modifications, I have used till recently with a remarkable measure of success.

I have tried it on a child of 12, a boy of 14, men and women of all ages, up to one old lady of 70 years, and have never had a moment's anxiety, either on account of heart weakness, undue discomfort, or threatened coma. I have felt that, at least, we had in this treatment taken a very forward and very hopeful step in the treatment of this most distressing and dangerous complaint.

The youth, whose case I mentioned at the commencement of this paper, had his first treatment during three intensely hot days in February and his progress may be detailed as follows:—

March 2, 1914.—Guelpa's treatment for three days. Lost 5 lbs. in weight. Urine 2,500 c.cm., 1.4% sugar.

March 12, 1914.—Guelpa's treatment for one day. Weight, 8 st. 7 lbs. Urine 1,000 c.cm., 2% sugar.

March 28, 1914.—After three weeks' diabetic diet. Weight, 9 st. Urine 1,500 c.cm., 2% sugar.

March 31, 1914.—After three days of Guelpa's treatment. Weight, 9 st. 2 lbs. Urine 700 c.cm., not a trace of sugar.

May 1, 1914.—Weight, 10 st. Urine 2,000 c.cm., 3% sugar.

May 5, 1914.—Guelpa's treatment for three days. Weight, 9 st. 13 lbs. Urine 570 c.cm., trace of sugar.

June 20, 1914.—Weight, 10 st. 6 lbs. Urine 1,500 c.cm., 2% sugar.

June 24, 1914.—After three days Guelpa's treatment. Weight, 10 st. 7 lbs. Urine 860 c.cm., no sugar.

January 19, 1915.—The patient has had two courses of Guelpa's treatment. He can load six loads of sand a day, and is very well indeed. He had no abnormal thirst. The last course of treatment was two months ago. He went to work on the following day. He says that he feels as well as he ever did after taking one or two meals.

August 23, 1915.—Weight, 10 st. 8 lbs. The patient has been at work since January. There is a trace of sugar in the urine.

¹ Read at a Meeting of the Victorian Branch of the British Medical Association on September 6, 1916.

Take some other cases!

Mrs. M., æt. 69 years.

January 11, 1915.—Weight, 9 st. 6 lbs. The patient has had diabetes for six years. She has been taking bread as usual and plain biscuits and starchy puddings. There is much thirst and polyuria. The quantity of urine is 2,900 c.cm.; the specific gravity 1.040. It contains much sugar.

January 25, 1915.—Guelpa's treatment. Much less urine, 0.8% sugar.

January 25, 1915.—The patient is feeling much better. She wants to do things. Weight, 9 st. 8 lbs.

March 5, 1915.—Guelpa's treatment. Urine 860 c.cm., no sugar. Weight, 9 st. 7 lbs.

April 26, 1915.—Weight, 9 st. 7 lbs. The patient is feeling well. There is no sugar in the urine.

Mr. B., schoolmaster, æt. 57 years, had been under treatment for some time, taking codeine and a diet in which he was allowed toast and brown bread and bananas, apparently as freely as he liked.

It is an extraordinary thing that in these modern days many medical men seem to think that there is some peculiar virtue in "toasting" bread, for one is constantly finding that patients have been led to believe that toasting in some way alters the starch assimilability and that such bread can be eaten with impunity. Similarly, faith in codeine takes a lot of killing, and trypsinogen is a fetish in some quarters; but I think and hope that light is dawning and a more rational dieting will supplant the drugging.

If you use codeine, and if it is of any use, how can you tell what you are accomplishing by diet and what by drug? Try your diet first; you may possibly find some use for codeine later; but don't use it as a routine; it is a lazy way of treating diabetes.

But, to return to my schoolmaster. I employed Guelpa's treatment, and his sugar disappeared. I then ordered him a rigid diabetic diet, with plenty of vegetable, and eggs, and casoid bread, and, once a month, he had a two days' fast. He has remained sugar-free, has put on some weight, and is now able to take some toast and potato without a return of his sugar. As this has gone on for a year, he may surely be regarded as fairly safe.

Take another case, that of Mr. W., æt. 61 years. This patient came to see me for a chronic eczema in the region of the serotum and groins and a cracked foreskin—a most suspicious sign of glycosuria. He had been under treatment by a dermatologist for a year with no success. Guelpa's treatment cured his eczema in a fortnight, and he has remained sugar-free for over 18 months. He still fasts for two days every two months, and is taking a limited amount of toast and potato daily. I insist on a rigid diet for two days a fortnight, and one day a week to be a purely vegetable and egg day. As time has gone on I have adopted certain modifications in the treatment, the principal being to insist on one fast day each week, and one purely egg and vegetable day. Patients can quite easily make a satisfactory day's menu out of eggs and vegetables, e.g., Breakfast: Lettuce or celery and cress, with poached or scrambled egg. Lunch: Spinach and poached egg, tomatoes, cabbage or Brussels sprouts or other vegetable and butter. Tea: The same as breakfast.

This limitation of calorie food is in the direction of the diet which Allen, in America, has advocated so successfully.

A very successful case was in a patient who was recently sent to me by Dr. McClelland, of Brighton. A lady, æt. 41 years, was found to have a large uterine fibroid, with severe hæmorrhage. She was much worried at the prospect of an operation, and developed great thirst and polyuria, and her urine was found to be loaded with sugar. Guelpa's treatment removed it in three days. She was then rigidly dieted, using casoid bread, with one fast day a week, and one egg and vegetable day, and one or two repetitions of Guelpa's fasting. As her urine remained sugar-free, her fibroid was removed after less than three months' treatment, a month ago. She was rigidly dieted for a fortnight, during which time there was no glycosuria. Then she was given toast again, and no sugar appeared. Three days later she took one potato. No sugar came through. Three days later she had a slice of toast and a potato in one day without any return of sugar. This has been repeated again, and, as her urine keeps sugar-free and she has evidently recovered a considerable tolerance for carbohydrate, I propose to allow her a moderate amount of bread and potato, of course, keeping a close watch on the urine for sugar. I have little doubt that there will be no return of the sugar in the urine, with a comparatively easily managed diet, and one she is likely to keep to.

Modern cooking has vastly increased our resource in handling diabetics, for with casoid bread, which is really very satisfactory if properly made, casoid biscuits of various kinds, and the many recipes to be found in such books as Poole's "Cookery for the Diabetic," Lenn's "Diabetic Cookery Book," in which sample menus for all meals for a week are given, there need be little monotony in the diet, and patients are much less likely to break away.

So much for the Guelpa line of treatment. I have had one or two failures only and certainly in mild cases and in cases in obese elderly people, I expect to be uniformly successful with it.

But, thanks to the work of Allen, in America, and others following his lead, we have made a much greater advance in the treatment of all cases of diabetes than by any other method, and have reached a position of greater hopefulness even in the severest cases than had ever before been dreamed of.

Allen's work has been largely based on experimental evidence obtained from partly depancreatized animals, in whom he succeeded in producing symptoms absolutely analogous to those of human diabetes.

He says:—¹

"Partial pancreatectomy, with preservation of the pancreatic duct so as to avoid atrophy of the remnant, gives a more satisfactory reproduction of clinical diabetes than is afforded by von Mering and Minkowski's total pancreatectomy or Sandmeyer's method of slow pancreatic atrophy. Simple lowering of the sugar tolerance without diabetes, or diabetes varying in intensity from the mildest to the very severe, can thus be produced at will. As previously pointed out, animals thus prepared constitute valuable test-objects and afford favourable opportunities for research concerning diabetic therapy. In the milder types the measures ordinarily used in human diabetes, namely, restriction of carbohydrate or protein and brief fasting, if necessary, suffice to keep the animals sugar-free and in good con-

¹ Allen, F. M., *Americ. Journ. Med. Science*, 1915, CL, p. 480.

dition indefinitely. But in a more severe type these measures do not suffice, and the animal quickly passes into a hopeless condition if more radical treatment is delayed. In this type the initial fast must sometimes be measured in weeks rather than in days. The subsequent diet must be such as to keep the animal at a low level of weight and metabolism. Certain influences which increase either weight or metabolism tend to bring back glycosuria in these animals, as in human patients. If glycosuria persists in any animal, the result is a downward sequence of lowered tolerance, emaciation, weakness, cachexia and death, with parallel degenerative changes in the islands of Langerhans. If glycosuria is prevented, the animals may remain lively and strong, though thin, and they may improve somewhat with time, and the islands seem to be spared. This evidence supports the hypothesis that one set of influences overtax and injure the internal function of the pancreas, and the opposite set of influences protect and rest the internal function of the pancreas."

It is impossible to go into the details of his work and observations; but his conclusions are practically that it is possible to render any case of diabetes, no matter how severe, sugar-free by a sufficiently prolonged fast, even up to six, seven or more days; that such fasting is a perfectly safe procedure, and that, subsequently, by carefully building up the diet and ascertaining the patient's tolerance not only to carbohydrate but also to protein and fat it is possible to keep them sugar-free. He emphasizes the fact that diabetics have in the past been over-fed, especially with protein, which produces glycosuria, and often with fat, which leads to ketonuria and also return of the sugar, and that there is a decided intolerance of protein in diabetes, just as marked as is the intolerance of carbohydrate. This explains the value of many past methods of treatment, which were really mild starvations, and it especially emphasizes the value of von Noorden's egg and vegetable days and of occasional fast days, which give the over-taxed metabolic functions a rest. Allen strongly insists on the necessity of under-nutrition for a time, and, as you will presently see, the earlier menus are of very low caloric value, and the diet is raised very slowly, to prevent a return of glycosuria. Many patients are very much improved by the reduction in weight.

Further, Allen has shown that cases with marked acidosis rapidly lose the excess of acetone and acetoacetic acid under fasting, without any alkaline treatment, and that the best treatment of threatening coma is fasting. In a few cases, with slight acidosis, he found that fasting caused sleepiness, heaviness and symptoms suggestive of onset of coma. He at once fed these patients with a carbohydrate-free diet, and the symptoms rapidly passed off. A second fast in the course of a week or so was perfectly satisfactory, and cleared everything up. Allen does not keep patients in bed, but thinks that they do better and that their urine becomes sugar-free more quickly if they are up and about, taking a moderate amount of exercise for part of the day at least. I have kept my patients at rest for the first two or three days, and, if they feel at all exhausted, have allowed a little weak broth, and 2 oz. of whisky in divided doses. Many patients lose some weight during the fast, and in stout people that is a definite advantage; but two of my patients actually put on weight during the fast, probably from water absorption. They were both very enfeebled, wasted persons.

The greatest difficulty is in the after-feeding. You must keep the urine sugar-free at all costs. If the glycosuria returns, starve again for one or two days, or drop down to a lower diet, and if that does not succeed starve. You have to try and find out what elements in the diet are in excess if sugar returns and reduce it, and hence some knowledge of caloric values is required in this form of treatment. It is not easy, but I think it is worth while, and, in any case of real severity, I believe nothing so far tried offers such good hope of benefit to the patient as Allen's treatment.

As an example of the mode of building up a diet in a severe case, I append a table, showing the successive steps in a patient who had to fast for six days before his urine became sugar free.

Day.	Protein. Grammes.	Fat. Grammes.	Carbohydrate. Grammes.	Total Calories.
1	2	+	5	30
2	15	12	4	189
3	23	18	8	294
4	36	30	11	471
5	18	48	9	560
6	51	44	17	688
7	52	51	15	750
8	46	51	19	740
9	49	78	20	1,008
10	50	101	21	1,239
11	49	123	19	1,422
12	Starved Because Sugar Came Through			
13	15	12	3	185
14	34	32	10	478
15	53	100	15	1,208

Patient discharged with advice as to diet. The corresponding menus for the above are as follows:—

First Day.		
Breakfast.	Dinner.	Supper.
String Beans, 25 grammes	Lettuce, 25 grammes	Lettuce, 25 grammes
Lettuce, 25 grammes	Cucumbers, 25 grammes	Tomato, 25 grammes
Coffee	Tea	Tea
Protein, 2 grammes.	Fat, trace.	Carbohydrate, 5 grammes.
		Calories, 30.
Second Day.		
Breakfast.	Dinner.	Supper.
Egg, 1	Egg, 1	Lettuce, 25 grammes
Lettuce, 25 grammes	Lettuce, 25 grammes	String Beans, 25 grammes
Cucumbers, 25 grammes	String Beans, 25 grammes	Tea
Coffee	Tea	
Protein, 15 grammes.	Fat, 12 grammes.	Carbohydrate, 4 grammes.
		Calories, 189.
Third Day.		
Breakfast.	Dinner.	Supper.
Egg, 1	Egg, 1	Egg, 1
Asparagus, 50 grammes	Cauliflower, 50 grammes	String Beans, 75 grammes
Lettuce, 25 grammes	Lettuce, 50 grammes	Celery, 50 grammes
Protein, 23 grammes.	Fat, 18 grammes.	Carbohydrate, 8 grammes.
		Calories, 294.
Fourth Day.		
Breakfast.	Dinner.	Supper.
Egg, 1	Chicken Broth, 170 c.cm.	Egg, 1
String Beans, 100 grammes	Egg, 1	Egg Whites, 2
Coffee	Celery, 100 grammes	Lettuce, 75 grammes
Cream, 28 c.cm.	Tea	Cucumber, 50 grammes
Protein, 36 grammes.	Fat, 30 grammes.	Carbohydrate, 11 grammes.
		Calories, 471.

Breakfast.	Dinner.	Supper.
Egg, 1	String Beans, 75	Egg, 1
Cauliflower, 100	grammes	Asparagus
grammes	Lettuce, 25	Tea
Coffee	grammes	Cream, 28 c.cm.
Cream, 28 c.cm.	Tomatoes, 50	
Butter	grammes	
	Butter	
	Tea	
	Cream, 28 c.cm.	
Protein, 18 grammes. Fat, 48 grammes. Carbohydrate, 10 grammes. Calories, 560.		

Breakfast.	Dinner.	Supper.
Egg, 1	Broth, 170 c.cm.	Egg, 1
Spinach, 75	Chicken, 50	Egg Whites, 2
grammes	grammes	String Beans, 75
Butter	Lettuce, 50	grammes
	grammes	
Coffee	Tomatoes, 75	Cucumber, 75
	grammes	grammes
Cream, 14 c.cm.	Asparagus, 75	
	grammes	
	Tea	Tea
	Cream, 14 c.cm.	Cream, 14 c.cm.
	Butter	Butter
Protein, 51 grammes. Fat, 44 grammes. Carbohydrate, 17 grammes. Calories, 688.		

Breakfast.	Dinner.	Supper.
Eggs, 2	Beef Broth, 170	Egg, 1
Asparagus, 100	c.cm.	Salmon, 50
grammes	Scraped Beef, 50	grammes
Coffee	grammes	Cabbage, 100
Cream, 14 c.cm.	Cauliflower, 100	grammes
	grammes	Tomatoes (raw),
	Spinach, 100	75 grammes
	grammes	String Beans, 100
	Lettuce, 25	grammes
	grammes	Tea
	Tea	Cream, 14 c.cm.
	Cream, 14 c.cm.	
Protein, 52 grammes. Fat, 51 grammes. Carbohydrate, 15 grammes. Calories, 750.		

Breakfast.	Dinner.	Supper.
Egg, 1	Chicken, 75	Egg, 1
String Beans, 100	grammes	Spinach, 100
grammes	Cauliflower, 100	grammes
Asparagus, 100	grammes	Celery, 50 gram-
grammes	Olives, 25 gram-	mes
Coffee	mes	Lettuce, 50
Cream, 14 c.cm.	Cucumbers, 50	grammes
	grammes	Tea
	Tea	Cream, 14 c.cm.
	Cream, 14 c.cm.	
Protein, 46 grammes. Fat, 51 grammes. Carbohydrate, 19 grammes. Calories, 740.		

Breakfast.	Dinner.	Supper.
Egg, 1	Chicken, 75	Egg, 1
Egg White, 1	grammes	Cauliflower, 100
Spinach, 100	String Beans, 100	grammes
grammes	grammes	
Celery, 50 gram-	Asparagus, 100	Cucumber, 50
mes	grammes	grammes
Coffee	Olives, 25 gram-	Lettuce, 50
Cream, 28 c.cm.	mes	grammes
Butter	Tea	Tea
	Cream, 14 c.cm.	Cream, 14 c.cm.
	Butter	Butter
Protein, 49 grammes. Fat, 77 grammes. Carbohydrate, 19 grammes. Calories, 1,008.		

Breakfast.	Dinner.	Supper.
Egg, 1	Lamb Chop, 75	Egg, 1
Lettuce, 50	grammes	Salmon, 50
grammes	Spinach, 100	grammes
String Beans, 100	grammes	Asparagus, 100
grammes	Celery, 50 gram-	grammes
Cucumber, 100	mes	Cabbage, 100
grammes	Olives, 25 gram-	grammes
Coffee	mes	Tea
Cream, 28 c.cm.	Tea	Cream, 28 c.cm.
	Cream, 28 c.cm.	
Protein, 50 grammes. Fat, 101 grammes. Carbohydrate, 21 grammes. Calories, 1,230.		

Breakfast.	Dinner.	Supper.
Bacon, 50 grammes	Beef Broth, 200	Egg, 1
Asparagus, 100	c.cm.	Tomatoes, 100
grammes	Chicken, 75	grammes
Spinach, 100	grammes	Spinach, 50
grammes	Cabbage, 100	grammes
Butter	grammes	Butter
Cream, 42 c.cm.	Cucumber, 50	Cream, 14 c.cm.
	grammes	
	Butter	
	Cream (made into	
	Ice Cream), 56	
	c.cm.	
Protein, 49 grammes. Fat, 123 grammes. Carbohydrate, 19 grammes. Calories, 1,422.		

Breakfast.	Dinner.	Supper.
Black Coffee	Chicken Broth, 200	Beef Broth, 200
	c.cm.	c.cm.
Protein, 12 grammes. Calories, 49.		

Breakfast.	Dinner.	Supper.
String Beans, 50	Egg, 1	Egg, 1
grammes	Asparagus, 50	Cabbage, 50
Black Coffee	grammes	grammes
	Tea	Tea
Protein, 15 grammes. Fat, 12 grammes. Carbohydrate, 4 grammes. Calories, 185.		

Breakfast.	Dinner.	Supper.
Egg, 1	Roast Chicken,	Egg, 1
String Beans, 100	50 grammes	Cauliflower, 100
grammes	Asparagus, 100	grammes
Coffee	grammes	Tea
Cream, 14 c.cm.	Cabbage, 100	Cream, 14 c.cm.
	grammes	
	Tea	
	Cream, 14 c.cm.	
Protein, 34 grammes. Fat, 32 grammes. Carbohydrate, 10 grammes. Calories, 478.		

Breakfast.	Dinner.	Supper.
Egg, 1	Squab, 100 gram-	Egg, 1
Tomatoes, 50	mes	Cold Chicken, 25
grammes	String Beans, 100	grammes
Coffee	grammes	Lettuce, 50
Cream, 28 c.cm.	Cauliflower, 150	grammes
	grammes	Spinach, 50
	Butter	grammes
	Custard made	Tea
	with one Egg	Cream, 28 c.cm.
	56 c.cm. Cream	
	and 28 c.cm.	
	Water Sweeten-	
	ed with Saccha-	
	rine	
	Tea	
Protein, 53 grammes. Fat, 100 grammes. Carbohydrate, 15 grammes. Calories, 1,208.		

represent differences not in degree, but in kind, and are diametrically opposed to the prevalent teachings; that is, the third opposes the idea that the diabetic should be kept at the highest possible level of weight and strength, and that gain in weight is synonymous with improvement; and it substitutes for this the plan of keeping most severe diabetics intentionally and permanently at a sufficiently low level of weight and metabolism, in the belief that return of symptoms and downward progress is thus prevented. The fourth feature stands opposed to the doctrines that fat feeding does not appreciably influence diabetic glycosuria, and that calories lost in the urine should be replaced by additional calories in the diet, preferably in the form of fat. It opposes to these the observation that addition of fat to a fixed diet suffices to bring back both glycosuria and ketonuria in most severe diabetics, and the principle that the patient's tolerance for fat and calories should be followed in the same way as the tolerance for carbohydrate and protein. The fifth feature consists merely of routine or incidental matters, which are not without practical importance. Among these may be mentioned (1) the diet such as not to overtax tolerance and yet satisfy the patient sufficiently that he will follow it continuously at home; (2) the absence of any specific craving for carbohydrate, such as diabetics are supposed to manifest, and the contradiction of the prevalent idea that most severe diabetics cannot be trusted; (3) the avoidance of the need of alkali for more than a few days, and therewith relief from disturbances due either to acidosis on the one hand or to prolonged large doses of soda on the other; (4) the principle of clearing up the urine quickly and devoting the greater part of the stay in hospital to educating the patient, rather than devoting the greater part of the stay in hospital to clearing up the urine and dismissing the patient shortly thereafter; (5) instruction of the patient in the simple means of controlling his own condition, through his diet, his body-weight, and the daily testing of his own urine with Benedict's or Fehling's solution."

This paper is already far too long, and there are many points I would have wished to discuss and many details I have been unable even to mention, but I have tried to give you a practical idea of what the new treatment is, and how to go about it. It demands great patience on the part of the physician, and great perseverance on the part of the patient, especially in the severe cases, but I know nothing that gives the patient hope of a cure so rapidly as the benefit he speedily feels from this treatment.

I still incline to the preliminary purging of Guelpa's treatment, but I shall certainly pursue in the future Allen's line of minimum nutrition, with occasional fast days and egg and vegetable days, and I feel that, from my own experience and all that I have read, we have made a real advance in the treatment of an increasingly prevalent and distressing disease. No one can tell the ultimate result of this line of treatment, but one can now approach these cases with some degree of hope, and really treat them, not merely pretend to do so, as has been all too much our practice in the past.

THE SYSTEMIC RESULTS OF INFECTIONS OF THE MOUTH, NOSE AND ACCESSORY SINUSES.

By Sydney Pern, M.R.C.S., L.R.C.P. (Eng.),
Acting Physician to Out-Patients, Melbourne Hospital.

In dealing with these infections, it is as well to group them all together, as it matters little from a systemic point of view where the toxins or bacteria gain entrance.

It is not the point of this article to deal with local evils, but those induced in the body by absorption of toxins and blood infections.

The chief sources of infection are the teeth, tonsils and accessory sinuses of the nose. As regards the teeth, there are two distinct sources of infection, suppuration round the gums, the so-called pyorrhœa, and apical infection of devitalized teeth. Pyorrhœa is at the present time receiving much attention, as it is now recognized that many diseases are directly due to it.

What are the original causes for the production of pyorrhœa? I am afraid this is a point we must leave for the investigation by members of the dental profession; but it evidently starts by some action which causes the gum margin to become separated from the teeth, allowing micro-organisms to gain access and multiply there. The deposit of tartar is often found associated with it. Now, whether the tartar is the predisposing cause to the harbouring of bacteria or the presence of bacteria with inflammatory reaction leads to the deposit of tartar will be an interesting point to decide, as prophylaxis of this condition is urgently demanded. Once pyorrhœa is established, evil results must sooner or later develop. First there is a constant absorption of toxins which tax the immunizing mechanism of the body to its utmost, and as soon as this begins to fail damage occurs.

The next very vital one is the constant breaking down of the natural barriers, on cleaning the teeth with a hard brush and even by the process of mastication blood infection is found to take place. In fact, if it were not for the constant swallowing of dead bacteria and toxins, which gradually imparts more or less of an immunity, as is well illustrated in a cat or dog licking its sores, one would run a grave risk of getting septicæmia. In any case the damage caused is grave enough. Apical infection is very subtle, on account of the difficulty of its recognition. Up to recent times it was not considered necessary to drill out and stop the roots of devitalized teeth, but with the advent of the use of radiography in dentistry it was found that many devitalized teeth showed areas of rarefaction and even absorption round the roots, and when these were extracted, abscesses or infected granulations were found. It frequently happens that these infected teeth do not cause any pain or trouble to the individual, but, at the same time, they may be the cause of a marked degree of toxæmia.

As statistics show that over 60% of devitalized teeth have apical infection, and very few of those infected are giving the owner any trouble locally, it can easily be seen that there must be an enormous amount of chronic toxæmia in the community at large. It is not my intention to deal with the treatment of these conditions here, as there are many able men already at the problem, but there are a few remarks worthy of notice. Apical infection can, and is being dealt with satisfactorily by surgical methods, by cutting off the apex of the root or cleaning out the root thoroughly and stopping; then curetting the rarefied area and allowing it to granulate up, thus

bringing the natural defensive forces into play. This would be practically impossible within the cavity of an infected root.

As regards pyorrhœa, the question may be asked: Can it ever be effectually eradicated or not? Unless the gums can regain a firm attachment to the teeth this seems almost impossible, and unless tartar can be prevented from depositing. It is not necessary to have pus pouring from the gums to cause septic intoxication and infection; the gums can be cleaned up and look quite healthy, but toxæmia and blood infection is still possible; cataphoresis, local antiseptics and cleaning only help. There are many who claim that they can cure pyorrhœa, but as many confess they cannot.

Emetine is useful in dealing with amœbæ, but its action on streptococci is at best doubtful. Vaccines are useful by raising the immunity.

As regards tonsils, it is a great mistake to be misled by the size. If gaping crypts are seen and pus can be expressed, or even if they are apparently healthy and there is a history of repeated attacks of tonsilitis, complete enucleation is necessary. Infected sinuses must be dealt with surgically, and with the aid of vaccines. With infection by such virulent organisms as are found in these localities, there is hardly any part of the body which may not be involved. It is very common to find tonsils, antra and teeth all involved, and it can easily be seen how infection can be conveyed from one to the other.

Inhalation of bacteria causes chronic bronchitis and in many cases asthma, toxic absorption causes different forms of arthritis, from mild to most serious types. Blood infection causes rheumatic fever and cardiac involvement. Nephritis is undoubtedly due in many instances to these causes. Pernicious anæmia can frequently be traced to the same cause. Chronic dyspepsia, chorea, neurasthenia and a host of other ailments are due to chronic toxæmia or direct blood infections from these sources. Even epilepsy is frequently improved by the removal of a septic focus. There is still another and, according to the writer's views, very serious damage caused to the immunizing mechanism by being constantly called upon and taxed often beyond its resources.

Many people infected in this way show marked thyrotoxic symptoms. (This symptom-complex is shown by the symptoms of nervousness, the condition of being highly strung and irritable, slight dilatation of pupil, the inclination to be thin, to suffer from palpitation, to get tired easily, to perspire readily, and to suffer headaches, all indications that the thyroid is being called upon to do extra work and to increase its output. As long as the thyroid apparatus is in good working order it does not hypertrophy, but in a large proportion of cases thyrotoxic goitre is seen and very frequently Graves' disease, which, in most cases, quickly responds to treatment on removal of the septic focus. A certain proportion of these infected cases show symptoms of deficient thyroid activity, suggesting that chronic infection has soon exhausted the thyroid, which, in turn, by upsetting the blood-pressure mechanism, leads to hyperpiesis. There does not seem to be a more

striking proof of the action of the thyroid assisting in the immunizing mechanism of the body than in these cases.

To sum up, a very large proportion of our bodily ills are directly traceable to infections of teeth, tonsils, nose and accessory sinuses, the removal of which, in the majority of cases, causes rapid arrest of the same, and too much importance cannot be attached to the thorough treatment of these conditions. It cannot be begun at too early an age. Especial attention should be paid to complete enucleation of infected tonsils in children. If proper attention is given to these primary causes, and this of itself is no difficult matter, what an enormous amount of disease and suffering will be eliminated from mankind. Many people do not like to lose their teeth, but when there is grave danger of involvement of vital organs of the body, it is foolish to waste time in trying to have pyorrhœa cleared up; in cases without any grave bodily danger it may certainly be worth while to give treatment a trial.

Reports of Cases.

A CASE OF RECURRENT GALL-STONES.

By G. A. Syme, M.S. (Melb.), F.R.C.S.,
Surgeon to In-Patients, Melbourne Hospital;

and
S. O. Cowen, M.B., B.S. (Melb.),
Resident Medical Officer, Melbourne Hospital.

Mrs. B., æt. 31, was admitted on September 23, 1910, with the following history: For seven years she had been subject to attacks of abdominal pain which was referred to the right hypochondrium, radiated round the costal margin, occasionally shot through to the back and was so severe in character that the patient had to lie down during the attack. The pain always came on between two and three hours after meals, and was accompanied by nausea. Vomiting did not occur naturally, but was usually induced by taking an emetic, as it immediately relieved the pain. There was no hæmatemesis or mælena, but jaundice and clay-coloured stools were noticed after every attack. Fourteen days previous to admission the patient had been seized by one of these attacks of pain, which recurred frequently during the following week, and had been practically continuous for seven days prior to coming to hospital. When examined on admission, her condition was as follows: Definite jaundice was present, and the tongue was coated. The pulse-rate was 76, the temperature 97° F., and the blood-pressure 116 mm. There was definite tenderness in the right hypochondrium and a tender indefinite mass, moving with respiration, was palpable in the gall-bladder area.

A diagnosis of gall-stones was made, and the following operation performed on September 7, 1910: Access to the abdominal cavity having been obtained by means of a straight incision through the right rectus, the gall-bladder was packed off and aspirated. It was then incised at the fundus, and 72 stones removed from it. The common bile duct was felt to be full of stones; it was incised and 18 more stones removed from the common, hepatic and pancreatic ducts through the incision. A split drainage-tube was sutured saddlewise over the incision in the duct. Some doubt being felt as to whether all the stones had been removed from the hepatic duct, cholecystectomy was considered inadvisable, and the gall-bladder was simply drained by a tube, fastened in it by two purse-string sutures of catgut.

On May 3, 1916, that is, 5½ years later, the patient was again admitted to hospital. For nearly five years there had been complete freedom from the attacks of pain, but for seven months prior to admission, symptoms similar to those

recorded above had recurred. Jaundice, however, had not been present.

A recurrence of the stones having been diagnosed, the patient was operated on five days after admission. The incision was made through the old scar, and the gall-bladder found to be bound down by adhesions, some of which were tough and fibrous and others more recent and soft. When these had been separated, a stone was felt in the hepatic duct, half-an-inch above the junction of the two ducts. An incision having been made over the stone, it was removed, together with a second, which was dislodged from high up the hepatic duct by means of a scoop. These two stones were hard and smooth, and obviously not of recent formation. The gall-bladder, however, was found on incision to contain a stone which was soft and friable and apparently of quite recent date. As there was some doubt whether another stone could not be felt high up in the hepatic duct, the gall-bladder was not removed, but was drained as before.

Comment by Mr. Syme.—Recurrences after operations for gall-stones are relatively frequent, but are nearly always due to stones left behind at the first operation. In the above case, the stones found at the second operation in the hepatic duct were certainly left there at the first operation, but that found in the gall-bladder appeared to be a fresh formation, which is said to be very rare. I was much tempted to perform cholecystectomy at the first operation, but was not quite satisfied that all the stones had been removed, and I have found that, where a second operation has to be performed after a cholecystectomy has been done the operation may be exceedingly difficult, as the advantages of the gall-bladder as a landmark and for drainage of the ducts are lost.

Reviews.

OPERATIVE MIDWIFERY.

The third edition of Munro Kerr's great book¹ has just reached us. The author says "it differs in no essential from its predecessors, but considerable alterations have been made in the text and a number of illustrations have been substituted and added, more particularly in the chapter on Cæsarean section." It may be advisable to mention a few debatable points and the author's opinion thereon.

In premature rupture of membrane, a conservative attitude is recommended. This chapter is more practical and informing than the treatment of the subject in any other midwifery text-book with which we are acquainted. To the practising accoucheur this chapter alone is worth the money paid for the book.

Twilight sleep by scopolamine and morphine is referred to as "fairly satisfactory, but involves most careful supervision." Omnopon and narcophine were being tried in the clinic as substitutes with promising results.

In regard to chronic valvular disease with failure of compensation, the author states that "there is greater safety in emptying the uterus in the earlier months." This is one of the conditions in which the author considers that vaginal Cæsarean section has a place. Appalling suffering results from allowing gestation to continue with a failing heart.

Extra-peritoneal Cæsarean section is spoken of as having many disadvantages and dangers, and only one advantage, viz., a safer scar. Insecurity of the scar is the great danger (remote danger) of the intra-peritoneal conservative Cæsarean section, and the author endeavours to meet it by suturing in three layers. He says the subject is still *sub judice*. Other authors are so impressed by this weakness of the scar and consequent dangers in future pregnancies that they subscribe to the dictum "once Cæsarean section, always Cæsarean section." It is evident that, on this account alone, the operation should not be lightly undertaken.

For accidental hæmorrhage of the concealed variety the author seems to prefer vaginal Cæsarean section with hysterectomy. Many obstetricians dissent from this opinion. In the vaginal operation the child (always dead) has to be extracted first with difficulty and hæmorrhage, whereas by the abdominal route the uterus with child *in situ* is removed with a minimum loss of blood and delay, if the method de-

scribed by Dr. Worrall in the *Australasian Medical Gazette* (June, 1908) be followed. Professor Munro agrees it is safer to remove the uterus in these cases; then why not remove dead child and uterus together?

Vaginal Cæsarean section is strongly condemned for placenta prævia; but the author has adopted a less antagonistic attitude than formerly towards abdominal Cæsarean section for this grave condition in certain exceptional cases.

In connexion with contracted pelvis the author writes: "Pubiotomy should be reserved for those cases in which spontaneous delivery was expected, and did not occur, and one attempt at forceps was tried and failed." With a *conjugata vera* of $3\frac{1}{4}$ to $3\frac{1}{2}$ inches the results of induction of labour at the thirty-fifth week (the earliest period at which the prospects for the child are as good as at full term) are very fairly satisfactory.

We have not space to quote from the very wise and practical chapter on the methods for induction of labour.

Albuminuria "may generally be controlled by suitable treatment; but when, in spite of this, it continues in considerable amount and for some time before labour, induction should be decided upon whenever the child is viable, not so much because of the danger of eclampsia as the danger of chronic cirrhosis of the kidney being established."

This position we endorse, as we also do the author's statement that in certain cases Cæsarean section is the treatment indicated for eclampsia in the interests of both mother and child.

We cordially agree that manual rotation of the head is the best treatment for occipito-posterior positions of the head, when this position is persistent. The diagrams and text explaining the method of procedure are very good.

The chapter on "The Forceps" is a most valuable one. Those points in its application which every obstetrician is supposed to know, but which alas! are often forgotten, are here emphasized in a most lucid fashion. We may quote the following from many others equally important.

"The forceps is a tractor. . . . The butterfly screw in an axis traction should not be kept tightly screwed up. . . . The head should be given time to mould in high forceps, which should not be applied if the head is still movable above the brim.

"A forceps delivery which takes more than fifteen to twenty minutes is attended with decided asphyxia. For the operator to place his feet against the bed and exert all his strength is not obstetrics. He has chosen the wrong procedure. . . . Auscultate the fetal heart from time to time. If the beats fall to 100 or become irregular there is great danger. Apply forceps, unless contra-indicated. Never apply the forceps unless the cervix is fully dilated.

"In high forceps the dorsal decubitus is best."

The author advocates the placing of the blades against the head, and not merely pushing in the blades to the side of the pelvis and trusting to the grasp being satisfactory. In positions other than the low pelvic we believe this is important.

"The forceps may occasionally be useful applied to the impacted breech."

Munro Kerr does not think there is much to choose between pubiotomy and symphysiotomy.

This book is so interesting, so easy to refer to, so clear in description, so sound in judgement that we cannot help wishing for the sake of the community that it were taken as his obstetric guide by every practitioner.

DISTRICT MEDICAL WAR COMMITTEE.

No. 2 Military District.

Our attention has been drawn to an error in the personnel of the District Medical War Committee of the No. 2 Military District. The representatives of the medical profession nominated by the State Commandant are: Dr. S. H. MacCulloch and Dr. David Thomas.

Attention is drawn to an alteration in the "Medical Appointments—Important Notice" of the New South Wales Branch on page 358, in regard to appointments under the Education Department of Medical Officers for the treatment of school children.

¹ *Operative Midwifery*, by J. M. Munro Kerr, M.D., C.M., 1916. London: Baillière, Tindall & Cox; Royal 8vo., pp. 725. Price, 25s. net.

The Medical Journal of Australia.

SATURDAY, OCTOBER 21, 1916.

Conscription.

The members of the Council of the New South Wales Branch of the British Medical Association have authorized the insertion of an advertisement in this issue, appealing for financial and other assistance for the National Referendum Society in its campaign in favour of returning a definite affirmative to the question which will be put to the people of Australia on October 28, 1916. We are informed that a canvass of the legal profession in the State of New South Wales has been arranged, and that other callings are being handled. Money and votes in the right direction are required, and the organizers of the movement are confident of widespread support from the doctors.

The medical profession has a difficult task in front of it during the continuance of the war. From the beginning, the requirements of the military authorities have been met by the members of the medical profession, and those who have had actual experience of war conditions have learned how essential it is both for combatants and for the non-combatant members of the Australian Imperial Forces to be adequately reinforced. Moreover, all medical practitioners have realized that there is only one possible termination of the war—in victory and in the destruction of Prussian militarism. They, having elected to spend themselves in the endeavour to heal and cure, must be opposed to rule by might and to the ruthless devastation of arms. A world war must be prevented from recurring, and the only conceivable way of achieving this end is to render the defeat of the enemy rapid, certain and complete. It is horrible, but there is no alternative. Lives must be sacrificed, dangers must be met deliberately in order that the sum of British endurance and suffering may be limited. The humanest view of the situation is that which ensures the most rapid termination of hostilities. There is but one means of hastening the declaration of peace. That means is by keep-

ing the British units up to their full complement. Our colleagues will contribute to this end by voting "Yes" to the question of the day.

H. W. Armit, 30-34 Elizabeth Street, Sydney.

ACOUSTIC EXERCISES FOR THE DEAF.

In the discussion which followed the reading of Mr. Earlam's excellent communication to the New South Wales Branch of the British Medical Association on September 29, 1916 (see *The Medical Journal of Australia*, October 7, 1916, p. 305), Dr. A. J. Brady referred to Urbantschitsch's renowned method of awakening or re-awakening the power of hearing by means of auditory exercises. As far as we are aware, this method has not been utilized to any great extent in Australia, and Dr. Brady's appeal for information in connexion with this method was therefore well-timed and of considerable practical importance. In the July issue of *The Laryngoscope*, Mr. John D. Wright, of New York, deals with this method, and quotes at some length the opinions expressed by Professor L. Castellani in an article published in *L'Infanzia Anormale*. In discussing the value of the Zund-Burguet apparatus, called the electrophone, a highly complex and ingenious instrument, reproducing the human voice almost perfectly as far as sound is concerned, but failing in the reproduction of syllabic groups, Castellani records his opinion that "the classic method of Urbantschitsch still represents the most practical treatment for the deafness unyielding to any medical therapy."

In order to appreciate the difficulty in determining the exact value of Urbantschitsch's method, it is necessary to refer briefly to the systems it was intended to replace. The first serious attempt to apply an education to the deaf was made by Abbé de L'Épée around 1780. This pious individual recognized that it was not sufficient to found an institute for deaf mutes in Paris, the first of its kind, but that some substitute for spoken language was an essential. He therefore applied Bonnet's finger language, and thus laid the foundation for the education of deaf mutes. It was soon recognized that, while an alphabet of signs rendered it possible for a deaf and dumb person to utilize language as a means of intercourse, the vast majority of normal persons would not take the trouble to learn it, and, consequently, the con-

versation of these unfortunate people was limited to the inhabitants of the institutions and a very few persons outside. The conception arose that the deaf might be taught to speak, notwithstanding the fact that they could not hear the voices of those with whom they conversed, nor even their own. In 1805 Itard attempted to produce some hearing in the deaf by systematized exercises in hearing. He appears to have failed to effect a distinct improvement in those under his own care, and, consequently, his method was not regarded as sound by his contemporaries. Blanchet made an attempt to work along the same lines in 1825, and Baries and Phillippe repeated the experiment at intervals of about ten years. We learn that no less an authority than Toynbee held the opinion that all endeavours to re-educate the hearing were bound to fail. From the records of the first half of the nineteenth century it appears that the evidence in favour of this plan was slender. A change came some fifty years later, when Urbantschitsch attacked the problem from a scientific standpoint. It may be that he was influenced by the observations of Abbé Verrier that certain deaf mutes could be approached by vocal exercises. The first step in the new school was the distinction between the totally deaf and those who had some residue of hearing. It was found that approximately 30% of the inmates of the deaf and dumb asylums were incapable of appreciating any sound. Urbantschitsch held that the auditory nerve endings in the cochlea in the vast majority of deaf children were in a condition of "lethargy from inactivity." While his premises were incorrect, the scheme which he built on them was sound, provided that it could be applied to the proper individuals. Urbantschitsch planned excellent systematic exercises by means of which a re-education of hearing could be applied. Unfortunately, the method was applied to all deaf children, and was consequently wasted in many cases. Again, the teaching was not individual, and although the voice of the teacher was used to a great extent, this was supplemented by a special form of accordion. The method was tried by otologists throughout the world, and was largely condemned after a short time. Politzer took a leading part in attacking it.

Almost simultaneously with Urbantschitsch, Bezold approached the subject from the individual stand-

point. He tested the children with the aid of tuning forks, and determined in each case what notes on the scale were perceived by the little ones. This preliminary testing enabled him to distinguish six groups of persons with residual hearing. A careful analysis showed that approximately one-half of these children (that is about one third of all the children in the deaf and dumb institutions) possess hearing which embraces the normal range of the speaking voice. The spoken voice consists of tones lying between the tuning fork range of b^1 to g'' , for the vowels except *e* (as in "we"), which lies about an octave higher. The sounds *f* and *sh* lie high, while *m*, *n*, *l* and *r* are in the lower register. All other consonants are in the range b^1 to g'' .

Bezold classified the children for educational purposes according to his hearing groups. Those who had residual hearing covering the whole range of the spoken voice were placed in one class or series of classes, those who had hearing of the central notes of the voice were classed together and those whose hearing remnants lay outside this range were grouped for other methods of education. In the case of the first class, the teacher spoke quietly into the ear of each child, and the sound was translated by objects, written signs, etc. When supplementary methods were needed, the pupil was given a mirror, through which he was able to watch the lips of the teacher as he spoke into the ear.

There is no doubt whatsoever that the function of that part of the auditory nerve which has escaped the destructive process leading to the deafness can be educated to appreciate sounds with increasing clearness, and that systematic individual exercises not only utilize the remains of hearing, but actually accentuate their delicacy. The benefit derived from Bezold's method was reported on in 1909 at the XVI. International Congress of Medicine, and only a few of the speakers put in a plea for instrumental assistance to the human voice. It was not questioned that a very material advance had been achieved by the introduction of the method. It requires infinite patience on the part of both teacher and pupil, and imposes a great strain on the teacher's voice. But we learn from Castellani that the most ingenious substitute for the human voice is incapable of achieving the same results. The method of individual acoustic

exercises has been employed in various asylums in Great Britain, and conspicuous success has followed its adoption in selected cases at institutions such as Donaldson's Hospital, outside Edinburgh. It certainly will repay all the trouble it entails, if it leads to the recognition of the human voice in intercourse.

ACIDS WITH FOUR ATOMS OF CARBON IN DIABETIC URINE.

It is well known that a discrepancy occurs not infrequently between the values obtained in estimations of sugar in diabetic urines according as the determinations are made by the reduction of cupric hydrate in solution or with the aid of the polarimeter. The amount of rotation measured by the polarimeter is less than that of a solution of glucose of the strength indicated by the degree of reduction. When readings with the polarimeter are made on the urine before and after subjecting it to fermentation this difference disappears. The urine, after it has been fermented, is found to be laevo-rotatory. A little over thirty years ago Kulz showed that considerable quantities of a laevo-rotatory acid could be obtained from such urines, and that this acid was an oxybutyric acid. The discovery of this acid was made during an attempt to isolate urochloralic acid from the urine of a diabetic patient who had taken a dose of chloral.

The presence of an organic acid in the urine of diabetic persons had, however, been previously suspected, and various investigators had endeavoured to separate and identify the unknown body. It will be of interest to note how this belief in the presence of an acid arose, as these early studies contain the germs from which many modern ideas on the diabetic state and on acidosis have their origin. In 1851 Miquel had shown that the administration of acids to animals by the mouth causes an increase in the amount of salts in the urine. The acid thus leads to a large excretion of basic substances. The pursuit of this line of study revealed that death follows the administration of the mineral acids by the mouth. It was soon observed that the dose needed to kill carnivorous animals, such as dogs, is much greater than the lethal dose for herbivorous animals. From this observation came the discovery that the acid intoxication in carnivora leads to a great augmentation in the formation of ammonia, which neutralizes the acid. The administration of hydrochloric acid by Coranda to Hallervorden showed that man behaves like a carnivorous animal in producing ammonia to avoid acid intoxication. Hallervorden, later, made a thorough examination of the excretion of ammonia by man in various diseased conditions. He discovered that, in diabetes, the amount of ammonia excreted each day may constitute a "colossal abnormality." He pointed out that the cause of this excretion must be sought in a high excretion of acid. When he determined the amounts of the inorganic acids present he could observe no parallelism to the quantities of ammonia.

He was thus led to think of the presence of organic acids. Stadelmann examined the urine of ten diabetic patients, and found that large amounts of ammonia were excreted in several of them. He determined to estimate the quantities of the important acids and bases in the urine of a suitable case. He found that, in a patient with an acid urine and a high excretion of ammonia, the basic equivalents greatly exceeded the known acid equivalents. He proceeded to isolate and identify the unknown acid. He succeeded in separating the acid, but he identified it erroneously as crotonic acid. Stadelmann formed the opinion that diabetic coma is due to acid intoxication, and proposed to administer sodium carbonate to counteract the acidosis. Minkowski, two years later, examined the urine of the patient from which Stadelmann had isolated the acid, separated the acid, identified it as β -oxybutyric acid, and compared it with the synthetic acid prepared by Wislicenus. This work was completed just as Kulz published his paper. Subsequent investigators have measured the amount of oxybutyric acid present under different conditions. In addition to this acid another substance containing four atoms of carbon, aceto-acetic acid, appears in the urine of diabetic persons. The amount of this acid present at any time is small as compared with the quantity of oxybutyric acid.

William Holdsworth Hurlley¹ has published recently the conclusions drawn from a careful study extending over seven years of the relation of oxybutyric acid to the diabetic state. He records his observations on seven cases of diabetes. The first patient was a medical man, aged 28 years, who was kept under observation during the last four months of 1909. Although the diet was weighed, not sufficient care was exercised to enable the protein, fat and carbohydrate in the diet to be accurately estimated. Records were made almost daily of the sugar, nitrogen, and oxybutyric acid excreted in the urine. The patient died of diabetes two years later. Restriction of carbohydrate in the diet caused a large excretion of β -oxybutyric acid. The second case was that of a woman, aged 21 years, who was under observation for four months, and who died at the end of that period in coma. Her diet was weighed and analysed with accuracy. The carbohydrate was diminished from 180 gm. daily to practically none. She remained on a daily diet of 180 gm. protein and 200 gm. of fat for ten weeks before her death. The feature of this case was the rapid accumulation of oxybutyric acid, which increased in six days from none to 34 gm. daily, when the amount of carbohydrate was diminished to 22 gm. each day. The amount of oxybutyric acid varied around 20 gm. daily until the death of the patient. There was no increase in the amount with the onset of coma. The third case was that of a man, aged 27 years. The carbohydrate was reduced to 130 gm. in this patient, but the reduction caused an immediate increase from 10 gm. to 30 gm. in the amount of oxybutyric acid excreted. A month elapsed before the excretion of acid returned to its former limits, despite an increase in the carbohydrate of the food to 200 gm. for a few days. A further cautious

¹ Quarterly Journal of Medicine, vol. ix., p. 301, July, 1916.

attempt was made to reduce the amount of carbohydrate, but any diminution below 100 gm. gave rise to an increased excretion of acid. The subsequent history of this patient is not recorded. The other cases, one of which is that of an elderly patient, illustrate the same conditions. A strict diet leads to an increased excretion of oxybutyric acid, and a large amount of oxybutyric acid can be excreted for weeks together without any symptoms of coma.

After giving a detailed account of the progress of the cases under his care, Dr. Hurlley makes a very thorough review of the data available to obtain evidence as to the rôle played by organic acids in the production of coma. He considers that a part only of the acids is derived from fats, and that proteins and carbohydrates serve as sources for these bodies. The author brings forward many facts which are not in agreement with the view that the fats are broken up by an oxidation of their β atom. He favours the hypothesis that the oxybutyric acid is derived from aceto-acetic acid, which is the primary product produced in metabolism, and which is converted to oxybutyric acid in the liver.

THE CONFERENCE OF SCHOOL MEDICAL OFFICERS.

It has been stated that the present is an age of congresses and conferences, and many who have suffered at the frequent gatherings have suggested that the habit has grown beyond a useful limit and that some check should be placed on any further exaggeration. There is, however, the other side of every question. When men who know each other chiefly or wholly through their writings meet, misunderstandings are removed, difficulties are lessened and new fields of thought are discovered. Socially and scientifically congresses serve a highly useful purpose, and it is a mistake to regard them generally as magnified picnics. It is therefore usually a healthy sign when persons interested in any special line of thought and activity arrange for a meeting to discuss their difficulties, to exchange their ideas and to seek fresh lines of thought, which may prove of value to humanity. We learn with satisfaction that the second conference of school medical officers is to be held in Sydney some time in December. The scope of matter for discussion is very wide, and we have little doubt but that many highly important and interesting problems will be placed on the agenda paper, and that many more will be dealt with privately after the sessions.

The present time is a little inappropriate for this meeting, unless some plan be devised to remove the inequalities between the various States, which have become accentuated by the circumstances of the war. The New South Wales Department of Education has been prosecuting a policy of rapid movement, and has endeavoured to bring under the notice of its medical officers all the school children in the State. There are 14 medical officers. In Victoria, Dr. Harvey Sutton is undertaking military duty, and, consequently, the staff of school medical officers is reduced to two—Drs. Grieg and Fitzgerald. South Australia still suffers from the fact that its extremely capable medical officer, Dr. Gertrude Halley, is look-

ing for a suitable assistant. The Departments in Queensland, Tasmania and Western Australia are also deficient in the number of school medical officers. If questions are to be decided by voting, New South Wales would be able to carry the meeting every time. We therefore venture to suggest that, should it be found necessary to determine matters of policy, each State be given one vote.

VENEREAL DISEASES.

The Council of the New South Wales Branch of the British Medical Association have considered the report on venereal diseases of the Departmental Committee appointed to enquire into the causes of death and invalidity in the Commonwealth, and at their meeting held on October 10, 1916, adopted the following report:—

In regard to the description and the modes of treatment of syphilis and gonorrhœa, this part of the report under review, while, generally speaking, conveying information essential to the understanding of the social, economic and therapeutic problems involved, is by no means free from exaggerated and misleading statements.

The Council, however, concerns itself mostly with the *Recommendations*, which it submitted to a critical examination, and in regard to them it states its views as follows:—

The "Recommendations" are dealt with under nine headings, viz.:—

1. Educational.
2. Provision of means of diagnosis and treatment.
3. Provision for Seamen.
4. Regulation of Prostitution.
5. Special Legislation.
6. National Insurance.
7. The sale of Alcohol.
8. Research.
9. Responsibility and Finance.

As to 1. Educational.

Under this heading are five paragraphs advocating an educational movement covering boys, girls and men, and laying stress on the importance of having an instructed medical profession. With these proposals the Council is generally in accord.¹

As to 2. "Provision of means of diagnosis and treatment."

The Council approves of the proposals:

- (1) for full provision for assistance in diagnosis by laboratory methods, and the entrusting of the Wassermann test to specialists in approved laboratories;
- (2) adequate provision
 - (a) for indoor hospital treatment, in connexion with existing general and special hospitals;
 - (b) for the infectious cases to be treated at special clinics under special staffs at the hospitals;
 - (c) for the treatment of children with congenital syphilis;
 - (d) for enabling medical practitioners and students to study the practice of the hospitals.
- (3) for all treatment to be given free of charge to patients of limited means.

As to 3. "Provision for Seamen."

The Council approves of special hospital provision at every chief port for infected seamen, either at the general hospitals or elsewhere.

As to 4. "Regulation of Prostitution."

The Council understands that so-called "Contagious Diseases Acts," as hitherto introduced, have not been successful.

As to 5. "Special Legislation."

The Council approves of all the propositions 1-13 set out under this heading, embodying, as they do, the main provisions of the Western Australian "Health Act Amendment Act, 1915," namely:—

- (1) prohibition of treatment except by legally qualified medical practitioner;

¹ The Departmental Committee advocate individual teaching of the lessons of clean living and continence by the father or school-master to boys at about the age of 15 years. Lectures should be given to men at technical and trade schools, and warnings repeated annually to soldiers. Girls should be dealt with according to their character by their mothers or by the schoolmistress.

- (2) imposing on infected person statutory duty to be treated;
- (3) impersonal confidential notification by medical attendant;
- (4) constituting it a criminal offence knowingly to infect;
- (5) prohibiting advertisements of cures or skill in treatment, etc.

And in regard to the five proposals for additional legislation, the Council approves of

- (2nd) proposal for the presence of venereal disease in the infectious stage at the time of marriage to be ground for decree of nullity of marriage in certain cases.
- (4th) proposal for further detention of prisoners found to be infectious, on the lines of the New South Wales Act;
- (5th) proposal for strengthening the police laws against street solicitation;

but it regards the proposal (1) for privileges to attach to a communication from the medical attendant to the person to be married in the event of the patient persisting in intention to marry as undesirable, and the proposal (3) for registration of still-births as impracticable and, in this connexion, useless.

As to 6. "National Insurance."

The Council is not in accord with the recommendation in favour of a scheme for National Invalidity Insurance covering Venereal Diseases; and is of opinion that, if the proposals made under the heading "Special Legislation," in accordance with the provisions of the "Health Act Amendment Act, 1915," of Western Australia, be given effect to, the position will be adequately met.

As to 7. "Sale of Alcohol."

The Council approves of the regulations concerning the sale of Alcohol being carefully reconsidered.

As to 8. "Research."

The Council approves of the encouragement of Research on the lines indicated.²

As to 9. "Responsibility and Finance."

The Council is in accord with the view that the Commonwealth Government is justified in undertaking financial responsibility in the furtherance of schemes for providing means of diagnosis, hospital treatment, and treatment outside hospitals and also for research.

TYPHUS FEVER IN GERMAN CAMPS.

In a recent issue of the *Revue d'Hygiène*, an interesting account is given by Surgeon-Major Detearde and Auxiliary Surgeon D'Halluin, two captured French military surgeons, of their experience in prisoners' camps in Germany, where typhus fever raged in epidemic form.

From this account it appears that, during the early months of 1915, the camps at Langensalza and Niederzwehren, where prisoners of war were incarcerated, became infected with typhus fever. Both camps were overcrowded, and the facilities for ordinary cleanliness were quite inadequate, so that every man became rapidly infected with vermin. No attempts were at first made in either camp to arrest the progress of the epidemic, and only after some of the German soldiers on guard in the camps were attacked was any effort made to isolate the sick or to disinfect the clothing.

Accurate figures as to the total number of cases and deaths in the two camps could not be given, but at Niederzwehren, of which they had more accurate information, they were able to state that the camp was divided into four blocks of huts, accommodating about 20,000 prisoners, of whom roughly 12,000 were Russian, and 8,000 Frenchmen. In the block to which the authors of the paper were attached, there occurred 1,834 cases, and they estimate that fully 5,000 cases were under treatment in the whole camp.

² The Departmental Committee advocates the encouragement of research into the following matters:—

- (i.) The relationship between inherited syphilis and the common diseases of middle life.
- (ii.) The relationship between acquired syphilis and ordinary forms of high arterial tension.
- (iii.) The causes which determine the localization of syphilitic lesions.
- (iv.) The life history of the *spirochaeta pallida* and
- (v.) The treatment of deep gonorrhoeal infection.

There were 67 French and Russian doctors in the camp, and 20 of them were stricken with typhus. The orderlies were supplied by volunteers, and, of these, no fewer than 96 contracted the disease. The mortality was high, but no definite figures could be given.

Referring to the aetiology of typhus, the authors believe that the most usual means of conveyance is by the bites of lice; but they also think it may be carried in the expectoration of the patient, especially in the early stages of the disease, when cough is a persistent and troublesome symptom.

There were many deaths in the camp from other diseases, such as tuberculosis, diphtheria, pneumonia, and sepsis. The unfortunate prisoners were obviously exposed to such privations and treated with such neglect and callous indifference that it is a matter for surprise that any of them escaped with their lives.

This report, of which a mere outline is recorded here, is corroborative of the story told of the Prisoners' Camp at Wittenberg, where fever-stricken English soldiers were subjected to a similar brutality and inhumane disregard of pitiful suffering.

A WARNING.

The following letter will be read with interest by practitioners. We have little doubt but that the crafty individual would victimize doctors as well as their patients if an opportunity presented itself.

September 29, 1916.

My dear Dr. —,

That matter of meeting you in the street is started in mystery, and is interesting. I knew it could be neither your son or brother, because I don't think either of them ever saw me. The circumstances are these: I was walking along Martin Place about midway between Pitt Street and George Street, when a gentleman came up to me and said, "How are you?" and shook hands. I said, "I am very well, thank you." He said, "How are the eyes now?" I said, "Pretty well." He said, "You ought to know me now when I mention the eyes." I said, "Oh, it's Dr. —, is it?" and he said "Yes." He then said, "That eye of your wants attending to. Turn round to the light!" and he looked at my eye and said, "Yes, the growth is nearly on to the pupil. You better come and let me fix it up for you." I said, "Oh! it's hardly worth while at my time of life." He said, "Well, the danger is if it grows over the pupil, it might, though I don't say it will, affect the other eye, and you might lose the sight of both." I said, "I can't afford it," and he said, "Oh, don't let the money trouble you. Come and get it done, and you can pay me £1 and the rest how and when you like." He then said, "I understand that you are in bad circumstances; is it so?" I said, "Yes." "Well," he said, "come and have your eyes done and you need not worry about the money; pay how and when you like, or it doesn't matter if you never pay." I said, "How much will it cost?" and he said, "You know what I charged you last time." I said, "Yes, £10," and he said "Yes, that's right, and we will say £6 this time. I never charge as much for a second operation." Then some casual conversation took place about my girls, showing he was well-acquainted with the whole family, so you see that I couldn't possibly doubt but that I was speaking to you. Then he said, "I have just come down from Katoomba in a car. I had a case up there, and it detained me a couple of days. I lost my overcoat (or I left it behind; am not sure which). You know that big coat that I always wore, and it had a cheque in the pocket and some other money, and I only have 2s. 9d. I wish you could let me have a few shillings if you have it to spare." I put my hand in my pocket and pulled out all the money I had, a half-sovereign note and a couple of shillings in silver and handed him the note. He said, "Oh, I didn't want that; I thought you might have a shilling or two." I said, "Take that; I have no silver," and he said, "Well, we will deduct this from the deposit on the operation." Afterwards he said, "No, we won't make this a professional matter. I'll send it to you to-morrow. I'll see you on Monday week, about a quarter to twelve.

Yours sincerely,

Abstracts from Current Medical Literature.

OPHTHALMOLOGY.

(144) The Giant Magnet.

In removing foreign bodies from the eye by the giant magnet Haab lays great stress on the importance of preventing the impaction of the particle into the posterior surface of the iris (*Archives of Ophthalmology*, May, 1916). This is avoided (1) by maximum dilatation of the pupil, (2) by immediately breaking the contact when the particle arrives behind the iris. For this reason the field of operation should be brilliantly illuminated; the break and make of contact should be effected by the operator's foot, and the patient should not be lying down, nor have his head rigidly fixed; (3) when the splinter has reached the back of the iris the eye must be turned to the side where the splinter is situated, and a larger lip applied to the magnet. If attempts to remove it fail, make an incision in the cornea, and introduce the hand magnet, or Long's cable behind the iris. If this is not successful an irido-dialysis can be made after a marginal incision in the cornea, an iris forceps introduced, and the iris seized and drawn towards the pupil; the magnet is then introduced into the anterior chamber, and the splinter is extracted. This is preferable to an iridectomy, which should be avoided. In the majority of cases the particle is drawn through the pupil to the posterior surface of the cornea, and, when the current is taken off, sinks into the lower angle of the anterior chamber, whence it is removed by the hand magnet through the original wound, or by a vertical incision in the cornea. A peripheral corneal wound is a mistake. In difficult cases the magnet may be applied to various points at the equator of the eye, and if the particle is shifted, as evidenced by sensation of pain on the patient's part, the current is immediately cut off, and the magnet again applied to the centre of the cornea. In no case should the magnet be drawn along the sclera over the ciliary body, otherwise the particle may become fixed there. In certain cases large particles may be removed through an incision in the sclera, but the author considers this method unsatisfactory, and only to be adopted if there is no other way open. Exact localization by X-rays is necessary only in those cases in which the magnet does not draw the splinter forward, or does not cause a painful sensation.

(145) Paralysis of the Sympathetic Associated with Cervical Rib.

M. S. Mayou (*The Ophthalmoscope*, June, 1916) has observed two cases of paralysis of the sympathetic in persons with cervical rib. A girl, aged nine years, was found to have ptosis of

the right eyelid, and a small pupil in the right eye, which did not dilate with shading or cocaine. There was also diminution of sweating on the right side, and exophthalmos. Examination showed an osseous swelling above the first rib, which proved on radiographic examination to be a cervical rib. There were no other paralyses. The second case was that of a woman of 46 years, with identical symptoms on the left side. The X-ray examination revealed a cervical rib. A smaller one was seen on the right side. No other paralyses were present.

(146) Disturbances of Vision from Cerebral Lesions.

In twenty carefully described cases of gunshot or shell injuries of the skull and brain, W. T. Lister and Gordon Holmes endeavour to draw some general conclusions as to the localization of visual functions, and especially of the macula (*Proceed. Royal Soc. Med.*, Vol. IX., No. 8). The first four cases presented quadrant defects in the field of vision. When one quadrant only was affected it was always the lower quadrant of the visual field corresponding to the opposite superior quadrant of the retina. In these cases the brain was injured above the level of the calcarine fissure. Seven cases illustrated central scotomata of various sizes, associated in some cases with homonymous hemianopsia. In the pure central scotomata cases the lesion was limited to the posterior ends of the occipital lobes, at or about the level of the posterior extremities of the calcarine fissures. In 2000 cases of head injury the authors have never seen a central scotoma where direct injury of the occipital poles could be excluded. Hence the evidence is strong that central vision is represented on either the mesial or lateral surface of the posterior poles of the occipital lobes, or on both. When homonymous hemianopsia in addition was present there were extensive lesions in the calcarine fissure and optic radiations. There were six cases of paracentral scotomata, where the lesions were in the neighbourhood of the posterior extremity of the calcarine fissure. The escape of the macular vision in these cases may be explained by the normal blood supply of the posterior pole by the posterior cerebral artery being supplemented by the middle cerebral artery, whose area of distribution often overlaps that of the posterior cerebral artery. Peripheral vision should be represented in the more anterior part of the visual zone, though no case proved this point definitely.

(147) Foreign Bodies in the Eye.

Bernard Cridland has collected 76 cases of foreign bodies in the eye in over 43,000 accidents to the eye, giving an incidence of 0.17% for the districts of Wolverhampton (*Ophthalmoscope*, August, 1916). The cases are classified according to the position of the foreign body. In the vitreous 12 eyes were saved and 24 lost, although among the latter the foreign body was

removed in a good proportion. In the lens, 10 eyes were saved and 2 lost, the foreign body being allowed to remain till the cataract became mature. In the posterior scleral wall, 4 eyes were saved and 7 enucleated. In three of the saved eyes the foreign body still remained in the eye. In the anterior chamber, 10 eyes saved, 1 removed. It will be seen that the vitreous is the usual place, and the chance of saving the eye is as one to two. The chances are better in the anterior part of the eye. The Hirschberg magnet was employed.

(148) Leber's Disease—A Suggestion as to its Cause.

J. Herbert Fisher presents certain facts and arguments which lead him to the opinion that slight and transient disorder of the pituitary body, implicating the visual pathways, may be a possible cause of hereditary optic atrophy (*Ophthalmoscope*, August, 1916). Leber's disease commences at or about the age of puberty, and in women around the menopause. The functions of the pituitary body are intimately bound up with those of the several glands. The failure of vision, and early onset of atrophy, the slight degree and transient character of the optic neuritis, the headache and vertigo are symptoms and signs common to Leber's disease and pituitarism. The writer has had under observation a brother and sister, aged 14 and 11 years respectively, suffering from this disease. A radiograph of the boy's *sella turcica* revealed nothing abnormal, but that of the girl showed the depression filled in with something which gave a cellular or honeycomb-like shadow. Organo-therapy with thyroid and pituitary extracts should be carefully experimented with in Leber's disease.

LARYNGOLOGY AND OTOTOLOGY.

(149) The Operation of Dacryocysto-rhinostomy.

Horgan records some modification of the technique as originally described by West and Pollak in the operation of intranasal drainage of the lachrymal sac, and draws attention to the advantages which this operation has over any other for the relief of epiphora and most anomalies of the tear-conducting apparatus (*Journ. Laryng., Rhin. and Otol.*, June, 1916). These advantages, he claims, have not been given a sufficiently practical or prolonged test by rhinologists in England. This lack of interest or want of appreciation is perhaps due to a too hasty judgement of only a few cases that have been operated on, or possibly to a conservatism on the part of oculists who, for one reason or another, refuse to pass their patients on to the rhinologist. The fact that the sac and duct are surrounded by structures which help to form the outer nasal wall, and that diseases and affections of the tear duct mechanism are often secondary to

some form of nasal diseases should be sufficient to delegate the surgery of this region to the rhinologist. The clean extirpation of the lachrymal sac demands as much, if not more, skill than the performance of any other operation which the oculist may be called upon to perform. This intranasal operation is a considerably easier task to the surgeon than sac extirpation is to the oculist. Patients suffering from epiphora without exception first consult the oculist, who should be in the position at the outset to investigate and eliminate any causative nasal factor. The author enters an earnest plea with the oculist that, if not himself conversant with the technique of intranasal examination and surgery, he should, in the interests of every one concerned, submit the patient to the care of the rhinologist. The operation has been adversely criticized and rejected by some rhinologists because the cure of lachrymal symptoms has not immediately followed the operation. This failure may be due to a neglect in after-treatment and inspection of the operation area within the nose. Obstructive symptoms are due to the growth of granulation tissue from the lachrymal window, and this usually occurs during the first six weeks. The author makes a point of examining every case at intervals of two weeks for a period of about two months subsequent to the operation, even if no symptoms are complained of. He anesthetizes the site of operation with cocaine and adrenalin, and the lachrymal sound is passed down from the outside for purposes of orientation, and the operation area is carefully examined. All granulation tissue is removed until the sound can be moved freely in all directions. It may be necessary to inspect this region six, eight or twelve times before the passage finally remains clear. He agrees with Toti and West that an extensive bone resection and a complete removal of the medial and posterior wall of the sac are of the utmost importance. The formation of granulation tissue is less prone to cause trouble in cases in which extensive removal of the sac wall and the surrounding bony framework has been undertaken. The amount of bone to be removed varies in individual cases in which the sac occupies a more external position. The author remarks upon the ease with which the sac can be approached in cases in which it is necessary to traverse ethmoidal cells of the lachrymal or infundibular variety, especially if these latter are diseased. He quotes Thorsch, who holds that the anterior ethmoidal cells of one or other variety intervene between the external nasal wall and the sac wall in 21% of cases; and Salus, who found this condition to exist in 18 out of 29 cases. Ritter found a deep nasal recess of the frontal sinus intervening between the inner sac wall and nose. In this respect the author draws attention to the close similarity which exists between the initial stages of this operation, and those of the newer methods of intranasal drainage for chronic suppuration of the frontal sinus. The operation is begun by a

resection of the anterior portion of the quadrilateral septal cartilage, in order that, with the speculum, an adequate view of the agger region and *forus lachrymalis* may be obtained, even in the narrowest nose. The canaliculus is not split up. The punctum is dilated and a lachrymal syringe is passed through the punctum downwards into the sac for purpose of cleansing and anesthetizing the part. After irrigation, the sac is anesthetized with a few drops of 3% cocaine and adrenalin solution. Afterwards the sound is passed down for orientation. The site of operation in the nose is rendered anæsthetic in the usual way with cocaine and adrenalin. The author uses a septal elevator of the Freer type to map out and elevate the roughly circular muco-periosteal flap which is to be removed. He does not retain any portion of the flap, as suggested by Halle, and quotes West, who is of opinion that the flap is unnecessary, as it quickly atrophies and loses any useful effect. Enough bone is removed to expose the inner aspect of the sac and upper part of the duct thoroughly. The sound is passed down through the outside for purposes of orientation, and care should be taken not to puncture the inner wall of the sac with the end of the sound, as laceration would render it harder to make a clean excision. It is advisable to remove a large portion of the sac wall, oval in shape, with its long axis vertical, by means of a fine pair of scissors or sharp scalpel. To facilitate this part of the operation, the probe may be used to dilate the wall of the sac inwards. In three of the author's cases it was found necessary to remove the anterior end of the middle turbinal at the time of operation, and, in another case, subsequently, owing to adhesions. He rather favours resection of a small portion of the turbinal at the time of operation, and quotes Thorsch, who is of opinion that partial resection of the turbinal is required in 35% of cases. The author claims most satisfactory results in all of the cases he has operated on, such as acute and chronic dacryocystitis; two cases complicated by external fistula in which a previous operation to extirpate sac had failed, simple epiphora that had failed to yield to other forms of treatment, and cases complicated by lupus and tuberculosis in or about the tear-conducting apparatus. He operated, with satisfactory results, on a child, aged six, who had suffered since infancy from a chronic muco-purulent dacryocystitis, which had resisted prolonged treatment with syringe and sound. In two of his lupus cases the disease involved the mucous membrane of the septum, the floor of the nose, and the outer nasal wall in the neighbourhood of the duct. In both these cases the disease was arrested and cured by appropriate measures, and the lachrymal obstruction was relieved. One case of a boy, aged 16, who was suffering from tuberculous disease of the ocular and palpebral conjunctiva and chronic pneumococcal infection of the sac, causing muco-purulent discharge and obstruction, obtained relief of the ob-

struction by intranasal drainage of the sac, and the conjunctiva disease became arrested. The author concludes by stating that intranasal drainage should be established in all chronic cases, no matter what form of external operation has been previously, though unsuccessfully, employed, and that this operation of West's should become the normal operation, as its results surpass those obtained by any other method. Much stress is laid on the need for careful supervision and methodical after-treatment.

(150) Naso-Pharyngeal Neoplasm Dispelled by Radium.

Kelly records a case of naso-pharyngeal growth successfully treated by radium (*Journ. Laryng., Rhin. and Otology*, August, 1916). A man, aged 57, was seen first on October 31, 1914, on account of nasal obstruction. A growth had been noticed six months previously, and it had gradually increased. There had been severe bleeding from the nose and mouth, and the man was much debilitated. The nasal fossæ were found to be normal, but the naso-pharynx was occupied by a growth which was attached to the roof and rested on the palate. The right posterior nares was occluded by the growth which impinged on the mouth of the right Eustachian tube. Its surface was irregular, finely granulated and red in places. The right ear was markedly deaf. The neoplasm was regarded as undoubtedly malignant, but a piece was not removed for microscopical examination, owing to the recent profuse hæmorrhage. An operation was recommended, but the patient was disinclined to submit to it. The patient was seen again on January 27, 1915. Fifty milligrammes of radium, screened with 2 mm. of silver and covered with 2 mm. of rubber, were prepared for insertion into the naso-pharynx. A thread was passed through each nostril into the mouth and tied round the radium, which was then drawn into the naso-pharynx, so as to lie between the growth and the soft palate. This was kept in position for 24 hours. For a week afterwards the patient suffered a good deal from ulceration of the palate and fauces. On March 10 the patient was re-examined and reported his nose free, that he had gained much in strength and that he considered himself cured. A small, rounded mass, however, was seen on the roof of the naso-pharynx, hanging down so as to conceal the upper half of the septum. The radium was again introduced and retained in position for 24 hours. The patient reported himself again on May 14; there was no sign of the growth, but its site of origin on the right half of the roof of the naso-pharynx was indicated by an adherent crust of mucus, the removal of which revealed an apparently healthy surface. On June 2 the appearance was the same as on the previous visit. Radium was applied the third time for 24 hours. On February 22, 1916, there was no sign of the recurrence of the neoplasm.

British Medical Association News.

SCIENTIFIC.

The monthly meeting of the Victorian Branch of the B.M.A. was held at the Medical Society's Hall, East Melbourne, on Wednesday, September 6, 1916. Dr. A. V. M. Anderson presided.

Dr. W. R. Boyd showed *three cases of tuberculous spine*. These had been treated with such rest as could be obtained on a firm hair mattress, without splints of any kind whilst in bed, and had been nursed almost entirely by their relatives at home. They had slept out on balconies, and had received tuberculin injections (T.R. human) once a week, commencing with one four-thousandth mgm., gradually increased to about one two-hundredth mgm. Dr. Boyd pointed out the difficulty of obtaining treatment for these cases over a sufficiently long period in any of the public institutions, and thought that the series might induce the general practitioner to undertake the care of such cases in the patients' homes. Two patients developed abscesses, but the third became convalescent without any formation of pus. All had rigid backs at the onset, and all gave positive skin tuberculin reactions and positive reactions to diagnostic doses of tuberculin.

1. Man, aged 33, admitted on April 8, 1907, to private hospital, where he lay on a hair mattress on the balcony for six months. He was removed to his home and lay on the balcony for another six months. He was allowed up with spinal support, but he developed a lumbar abscess, which was opened by Mr. T. H. Boyd, who injected an emulsion of Iodoform on May 12, 1908. The abscess refilled, was again incised, and was injected with Iodoform emulsion in July. The patient was allowed up with spinal support in January, 1909, and was visited for the last time on April 7, 1909. He continued to wear his spinal support for 12 months. He resumed his occupation as a grocer about June, 1909, and has not lost a day's work since. When the patient stripped for exhibition he appeared to be physically strong, while the movements of his back were perfect.

2. Man, aged 30, seen on May 12, 1912, with pain in the back and spinal rigidity. He remained at rest in bed until October, 1913. He was then allowed up with spinal support. In May, 1914, he developed an abscess, which Mr. T. H. Boyd opened and injected with Iodoform emulsion. In November the abscess refilled, was reopened and again injected. For the following three months it discharged intermittently. The patient remained in bed until June, 1915, when he weighed 15 stones. When he first went to bed, his weight was 9 stone 10 lbs. The members present noted that he had perfect movement of the spine, had no symptoms, and was a member of the A.I.F.

3. Man, aged 33, who complained of pain in the back on March 26, 1912; fourteen days later spinal rigidity was noted. In March, 1913, he was allowed up with spinal support, and, after two months spent in the country, resumed his work in May, 1913. He has continued well and at work ever since. His back movements were perfect.

Dr. W. Kent Hughes remarked that the length of time that these cases were laid up was less than usual. In his experience hardly less than two years was required to get good results. (Dr. Boyd interjected that two of his cases had spread over two years.) Dr. Kent Hughes was not certain whether he could commend the dispensing with those splints which medical practitioners had been in the habit of applying.

Dr. Anderson suggested that it would be interesting to get X-ray photographs of the three cases. There was considerable difficulty in treating these cases in public hospitals, owing to the time required to effect a cure. He thought that tubercular cases, whether of spine or of lung, should be treated in much the same way at a tubercular sanatorium. He had advised a patient with tubercular kidney in whom operative treatment was impossible, to adopt an open-air life, with the result that the kidney trouble had disappeared. A great need would be supplied if tubercular sanatoria were opened to cases other than those of the lung.

Dr. J. F. Wilkinson read his paper on "Starvation and Diet in Diabetes," which appears in this issue of the Journal (page 335). At the close of the paper he exhibited

a number of diabetic foods, all home-made from specially prepared flour.

Dr. R. R. Stawell desired to thank Dr. Wilkinson for his extremely instructive paper on the modern treatment of diabetes. The paper was in every way valuable; particularly useful were the details concerning the food material and the diet. About two years ago he had the advantage of being introduced to this new method by Dr. Wilkinson, who then described what might now be called his "first case." At that time he was impressed by Dr. Wilkinson's courage and clinical discrimination, for it required some courage to starve a diabetic subject, seeing that clinical experience had shown that a too rigid and a too limited diet was apparently apt to be associated with the production of diabetic coma. It was right to recognize that the essential advance in this treatment was not just "abstemiousness," but "starvation"; to "cut down" the diet might be bad treatment, while to "cut off" the diet altogether would be beneficial. Certainly it was to be recognized that well-balanced abstemiousness in the old treatment of diabetes was to be preferred to rigid abstinence from the carbohydrates and indulgence in all other forms of food, a condition that one frequently found. Dr. Stawell remembered a striking case, illustrative of this: A prominent politician had been found by his medical attendant in a neighbouring State to have glycosuria. He was dieted in the ill-balanced manner described, and soon developed great somnolence in debate, very irritating to his political opponents. On being consulted, Dr. Stawell found much acetone present in the specimens of water. The diet was ordered to be less rigid and smaller in quantity, and the patient did very well, and was still, at the end of many years, intellectually bright and vigorous.

While away on war service, Dr. Stawell said that he many times questioned Lieutenant-Colonel C. J. Martin (Director of the Lister Institute, but temporarily attached to the 3rd Australian General Hospital) concerning the problems of food abstemiousness and food abstinence, for even among the robust population of the Australian army cases of acute diabetes occurred. It appeared, not only from Allen's wonderful experiments, but also from the wider experiments which "suffragettes" performed on themselves under the term of "hunger strike" or voluntary complete starvation, that with complete absence of food there was not developed in the body any acetone substance or anything of that nature sufficient to be associated with coma. Up to a certain point of starvation, the balance of metabolism remained good; if, however, unsuitable or unassimilable food was introduced, even in small quantity, the balance of metabolism might be seriously disturbed. As every paediatricist knew, the condition of cyclical vomiting, with the presence of acetone, still remained very obscure, but it certainly seemed that the modern method of the treatment of diabetes might be accepted as sound. He (Dr. Stawell) had now under his treatment at the Melbourne Hospital a patient with diabetes, an old man, a most unpromising case, who had, however, already responded in an encouraging way to a modified Allen's method of treatment. After hearing Dr. Wilkinson's views and experiences the patient would be placed under more definite and a bolder treatment of starvation. It would be of special interest to show this case at the next clinical meeting.

Dr. A. V. M. Anderson said that the Association had been indebted to Dr. Wilkinson three or four years ago for drawing attention to Lenhartz treatment of gastric ulcer. It had proved of the greatest value. He believed that the introduction of Guelpa's treatment was going to do the same for diabetes. He had used it to a limited extent in four cases with satisfactory results. In one case of arteriosclerosis and diabetes with 2% of sugar the urine had become free from sugar and had kept so ever since. In the Alfred Hospital there were two cases free from sugar as a consequence of this treatment; but the trouble was to know how they were to manage after leaving the hospital. With private patients there was not that difficulty. He asked whether Dr. Wilkinson had come across diabetic patients whose neuritic symptoms had yielded to the treatment. He had a patient at the Alfred Hospital with glycosuria, dropsy, systolic murmur, and failing heart and with 2% sugar in the urine. She had been kept on digitals without much benefit. He asked to what extent would Dr.

Wilkinson counsel treatment by starvation? His own experience had been that trypsin had been of some value, and not valueless, as indicated by the paper. He inquired whether Dr. Wilkinson used alkalies, as recommended by Allen, in conjunction with starvation. He had given them freely.

Dr. Wilkinson, in reply, said that the treatment of diabetes was expensive, and this expense was a difficulty in public hospitals. In the case of a boy, aged 14, the trouble was how to get a suitable diet for him in the hospital, and that would be the difficulty in Dr. Stawell's case. It was impossible to provide a diet at the hospitals on these lines, especially as the nurses were already overtaxed. The boy, when admitted from the out-patients' department, looked very ill, weak and wasted; he had now put on weight, was cheerful and well. He got rid of his sugar, but some came back. So far it had not been possible to build up a diet in hospital for a boy like that; but an attempt would be made to get him back in the hospital, and do something in that way for him. The boy was in the habit of making his own casoid bread and doing a regular starve every now and again.

Guelpa did treat patients with failing heart without the slightest harm, and with some benefit. The speaker had not treated a case of definite neuritis, but Guelpa's treatment cleared up many diabetic symptoms immediately.

With regard to trypsin, he could not tell what the drug was doing. The first thing to find out was what the diet was doing, and then try the drug if they failed otherwise. He had used alkalies fairly freely, especially where the sugar was coming away, more for the reason that such patients lost a fair amount of calcium and magnesium, and the alkalies would be helpful in replacing these losses. He had given magnesium with benefit to those suffering from acidosis and dropsy. If a patient were treated on Allen's lines it would not be necessary to give alkalies, as the patients did not lose calcium and magnesium. Calcium loss was important, as bones became brittle; one of his patients slipped and broke the patella. On the matter of acidosis, he had no suggestion to offer, as nobody knew what acidosis was.

MEDICO-POLITICAL.

ANNUAL MEETING OF THE DELEGATES OF THE AFFILIATED LOCAL ASSOCIATIONS OF MEMBERS WITH THE COUNCIL OF THE NEW SOUTH WALES BRANCH.

The Annual Meeting of the Delegates of the Affiliated Local Medical Association with the Council of the New South Wales Branch was held at the B.M.A. Building, 30-34 Elizabeth Street, Sydney, on October 6, 1916, Dr. Sinclair Gillies, the President, in the chair. Eight of the seventeen local Associations were represented. Apologies for non-attendance of three delegates, whose services were required for military duty, were read.

Friendly Society Practice.

Dr. F. P. Sandes moved:—

That the I.O.O.F. letter of June 10, 1916, suggesting that, where medical officers attend I.O.O.F. members attached to their Lodges as "medical members" thereof, payment be made by the I.O.O.F. Lodge of which the person attended is a member, be discussed.

He pointed out that the Grand Secretary of the Independent Order of Oddfellows had communicated with the Honorary Secretary of the Branch in June of this year in connexion with the difficulty in placing members of one lodge on the medical list of another lodge. As an example, he instanced a member belonging to a city lodge and living in a suburb. The Secretary of the city lodge would be compelled to communicate with the Secretary of the suburban lodge, and the latter would have to communicate with the medical officer. The Grand Secretary proposed a means for overcoming this difficulty. He suggested that the Secretary of the original lodge should be empowered to place members of his lodge on the medical list of another lodge, and to forward the fee direct to the medical officer of the second lodge, without having to submit the list to the lodge itself. It was claimed that this expedient would

save misunderstandings and time, and be a source of economy. The fees would be paid in advance. The proposal had been submitted to the various local Associations, who had had ample opportunity to consider it. Dr. Sandes pointed out the obvious disadvantages of the scheme, and, with the consent of the meeting, amended his motion by the substitution of the word "disapproved" for the final word "discussed."

Dr. E. A. R. Bligh (Northern Suburbs Medical Association) seconded the motion, as amended, which was carried.

Dr. R. H. Todd (Honorary Secretary, New South Wales Branch) moved, in the place of Dr. W. C. McClelland (South Sydney Medical Association):—

That it be a recommendation that medical officers be notified that it is contrary to the terms and conditions of the Common Form of Agreement between medical officers and Friendly Society Lodges that daughters, after attaining the age of 16, should be attended at lodge rates unless they have been admitted as members of the lodge in the manner prescribed in the Agreement.

He pointed out that this matter had been brought to the Council by one of the members. It was quite obvious that, in so far as the lodges with female members were concerned, the female members of the family of a lodge member should not be treated by the medical officer unless she had been admitted as a member of the lodge. Where no provision for female members existed, daughters of members over 16 years of age had no claim for treatment. Dr. Todd had sent enquiries to the local Associations to ascertain whether the practice was general, but had been informed that it practically did not prevail at all. It was wise, however, to deal with the matter on principle.

Dr. E. A. R. Bligh (Northern Suburbs Medical Association) seconded the motion. The motion was carried *unanimously*.

Out-Patient Departments in Country Hospitals.

Dr. G. A. Buchanan (Central Southern Medical Association) hoped that the members would not regard the motion he was about to propose as an annual pious expression, although it had been carried in 1915. His Association recognized the necessity for a re-confirmation, in view of the fact that some confusion might arise in connexion with the definition of a country hospital. The motion which stood in his name was as follows:—

That, in country hospitals, out-patient departments should not be recognized, except for the immediate treatment of accident and other urgent cases.

He stated that no necessity existed for out-patient departments in small country hospitals. He recognized, however, that the same could not be said in connexion with the hospitals in populous centres. His Association had suggested that the motion should apply only to hospitals outside the metropolitan area, in which no provision was made for a resident medical officer. Although this definition was not quite satisfactory, it was held to be practical, since patients would not be so likely to make excessive use of the department if a comparatively unknown man were in charge of it than if medical practitioners of the district accorded treatment there.

Dr. E. A. R. Bligh seconded the motion, and stated that he was in agreement with the remarks of the proposer. He thought, however, that it would be better to pass a resolution which would apply to hospitals containing less than a given number of beds, rather than to make the presence or absence of a resident medical officer the dividing line.

Dr. G. A. Buchanan (Central Southern Medical Association) pointed out that the abuse was widespread. In his district there were very few people who could not afford to pay the medical practitioner a private fee. He spoke of the practice which obtained in a small town in his area of out-patient tickets being distributed by storekeepers to their customers. In Yass there was no out-patient department, and there was no need for one. The people got on very well without it.

Dr. L. W. Roberts (Western Medical Association) considered that out-patients' departments should not be encouraged. He agreed with Dr. Bligh that the basis for exclusion should be the number of beds, and suggested that no hospital with less than 30 or 40 beds should have an out-patient department. He recognized that, even when out-patient departments did not exist, medical practitioners

might find it convenient to send patients to the hospital for examination and treatment. There was no objection to this practice.

Dr. R. H. Todd held the opinion that a hard-and-fast definition of a country hospital in a resolution of this kind might be disadvantageous. There were difficulties in setting up any good definition which would be more elastic than those dependent on the provision for a resident medical officer, the number of beds or the size of the local population. Under these circumstances he moved the following amendment:—

Except at places approved by the Council, out-patient departments should not be recognized in country hospitals unless the work of such departments is strictly limited to the immediate treatment of accident and other urgent cases.

The amendment was seconded by Dr. J. C. Hughes (Eastern Suburbs Medical Association). Dr. Buchanan pointed out that care would have to be exercised in the selection of places which the Council might approve for this purpose.

The amendment was agreed to, and was carried as a substantive resolution.

War Emergency Organization.

Dr. E. A. R. Bligh (Northern Suburbs Medical Association) moved as follows:—

(1) That it be a recommendation that, in the case of any medical practitioner residing within the area who is absent on active military service, no other medical practitioner shall be permitted to accept appointment as medical officer of any Friendly Society Lodge of which such absent medical practitioner is a medical officer for the period of the war and for six months after peace has been declared, unless such absent medical practitioner sells his practice or voluntarily resigns his appointments.

(2) That no medical practitioner shall be permitted to commence practice in any district from which a medical practitioner is absent on active military service without the consent of the absent medical practitioner or without purchasing a practice or without the consent of the local Association.

The meeting determined that Part I. should be taken separately from Part II. Dr. Bligh considered that the motion required no argument in its favour. It was a self-evident proposition.

Dr. Harold Browne (Western Suburbs Medical Association) seconded the motion. He thought it would be wise if, instead of limiting it to six months after peace had been declared, the rule were made to apply for six months after the return of the medical practitioner. This suggestion was accepted, as was the addition of the words "or without the consent of the local Association" at the end of the paragraph.

Dr. R. H. Todd called the members' attention to a resolution of the Council which had been adopted as a rule of the Branch on August 28, 1914. This rule read:—

That, with a view to conserving the interests of those members of the Branch who undertake naval or military service during the existing state of war, the rest of the members individually engaged, in the event of being called upon to fill their positions, or to attend their patients, to restore the same to them upon their return to civil practice, so far as it may be in their power so to do.

The Council had discussed this question very thoroughly. Dr. Todd thought that it would be unwise to bind the Association in unknown combinations of circumstances. He considered that the rule of the Branch sufficed for the purpose.

Dr. Sinclair Gillies expressed the view that the motion dealt with a specific matter, and was therefore not quite the same as the general rule to which Dr. Todd had referred.

The motion was then put and carried unanimously, in the following form:—

That it be a recommendation that, in the case of a member absent on active military service, who is medical officer of any Friendly Society Lodge, sanction (under Regulation 2 of the Regulations of the Branch—"Contract Attendance: Friendly Society Lodges") for acceptance of appointment as medical officer or additional medical officer of the Lodge shall not be given.

(i.) during the continuance of the war, or

(ii.) until six months after the return of the absent medical officer;

provided that this restriction shall not apply where the applicant for sanction is the purchaser of the practice or where the medical officer has resigned his appointment.

Dr. E. A. R. Bligh then moved Part II. He recognized that there were great difficulties connected with the motion. In the Northern Suburbs Medical Association they had acted on this principle, and only in one case had any real difficulty arisen. They had submitted the resolution to the Council, but the Council had refused to endorse it.

Dr. A. J. Opie (North-Eastern Medical Association) seconded the resolution *pro forma*. He raised the question whether this resolution would prevent a practitioner from taking in a partner. Dr. Bligh held the opinion that it would, and that a practitioner joining a man already in practice in the district would be regarded as commencing practice.

Dr. Sinclair Gillies objected to sweeping resolutions which might have a far-reaching effect. Members must recognize that the war might continue for years. Dr. Bligh expressed his willingness to amend his motion by substituting the consent of the Council for the consent of the Local Association.

Dr. R. H. Todd considered the resolution a dangerous one. He thought that difficulties would arise in areas where the local Medical Associations were not very active.

Dr. L. W. Roberts urged caution, since the reputation of the Association as a close corporation was gaining ground. He considered it was highly essential that the interests of absent members should be safeguarded.

After some further discussion, Dr. R. H. Todd suggested that the resolution should be limited to those local Associations who chose to adopt it. This did not meet with the approval of the members. Dr. A. J. Brady maintained that there must be uniformity. If it was wrong or unethical for a practitioner to commence in practice in one district from which men had gone to take up military duty, then it must be unethical if the same course were followed in another district. He called the attention of members to the fact that a large number of men had started practice in Macquarie Street since the war had begun. Some of these men, he believed, had come from the area of the Northern Suburbs Medical Association. Other speakers dealt with the difficulty arising from the fact that a few men openly flouted the rule of the Branch.

The motion, on being put to the meeting, was carried with two dissentients.

Dr. A. Maitland Gledden (City Medical Association) moved:—

That it be a recommendation that no medical practitioner shall commence practice in any district from which a medical practitioner is absent on active military or naval service without the consent of the Council.

He pointed out that this motion was identical to that moved by the delegate of the Northern Suburbs Medical Association, save that the consent of the Council and not of the local Association would be required. He would be willing to exempt Macquarie Street, College Street and Elizabeth Street from the scope of this resolution. The motion was not seconded.

Removal from the Medical Register of the Names of Alien Enemy Subjects.

Dr. A. Maitland Gledden moved:—

That it be a recommendation that the New South Wales Medical Board be approached with a view of removing from the Register of Medical Practitioners of New South Wales the names of:—

- (1) All persons registered in virtue of German or Austrian qualifications who are not resident in New South Wales; and
- (2) All persons registered who have been interned as alien enemy subjects or otherwise.

Dr. A. J. Brady seconded the motion, with which he was in hearty accord. He had doubts whether the Medical Board had power to deal with this matter.

In supporting the motion, Dr. R. H. Todd stated that the Medical Board had had this matter under consideration, and had referred it to the Crown Solicitor for advice as to whether they had power under the Medical Act, 1916, to

remove these names. The Crown Solicitor had advised that fresh legislation would be required before these names could be removed from the register. Dr. Todd had therefore urged his colleagues to approach the Government with a view of obtaining fresh legislation. In reply to a question, he pointed out that the New South Wales Medical Register contained the names of practitioners presumably of alien origin who were no longer resident in the State. The Board could not remove a name save under the penal clauses, or when there was presumptive evidence that the practitioner was dead.

The motion was carried unanimously.

Periodical Visits to Outlying Centres.

Dr. A. J. Opie (North-Eastern Medical Association) moved as follows:—

That it is inimical to the interests of members to allow periodical visiting of any centre at which the visiting practitioner does not reside, except he obtains permission of the Local Association of Members of the district, provided that nothing in this resolution shall prevent any member visiting any other centre in response to any *bona fide* calls from patients not being attended by any other practitioner.

He pointed out that there were definite objections to the practice of visiting outlying centres at stated intervals for the purpose of seeing patients. It was liable to be made use of by patients to the disadvantage of the practitioners, and he had no doubt whatsoever that the latter used this expedient as a means of touting for patients. There was no necessity for it, and it frequently happened that when one practitioner introduced the practice in a given place, the others in his neighbourhood had to follow suit. A room would be engaged at the local hotel, and the visiting practitioner might find that he had travelled a long distance to see one patient.

Dr. L. W. Roberts seconded the motion. He thought that the public took advantage of this arrangement, and obtained a great reduction of the visiting fee thereby. There was no need for this practice, and he felt that it was bad for both the public and the profession. In his district the distances which medical practitioners had to traverse were probably greater than in any other district.

Dr. E. A. R. Bligh proposed that each Local Association should decide for itself in this matter. Dr. Opie could not accept this suggestion, as he could conceive that Council might find it inadvisable to support the policy adopted in one area, when the same policy was not in force in a contiguous district.

Dr. Sinclair Gillies explained that this matter had been discussed by the delegates in 1914, and that it had then been determined that each local Association should make the provision best suited to its conditions.

Dr. A. J. Brady asked whether practice in Macquarie Street by men who lived in the suburbs would not come under the rule. He again emphasized the necessity of regulating practice uniformly and equitably. It was urged that this argument was not valid, inasmuch as the practitioner who had rooms in Macquarie Street followed his practice on purely personal grounds, and provided for the convenience of his patients, whereas the country practitioner, who paid periodical visits to outlying centres, did so for the purpose of obtaining patients. Dr. Opie stated that he travelled about 1,000 miles each year to see his lodge patients, and that he was paid £30 for covering this distance. He did not want to visit outlying centres for the purpose of seeing any patients who might be inclined to wait until the day of his visit.

Dr. R. H. Todd supported the motion, and thought that the only difficulty that would be experienced would be in those areas where the local Associations were not acting strongly and energetically. He presumed that the motion would have effect only in regard to small centres where there was no medical practitioner.

Subsequent speakers examined the question from the point of view of the convenience of the public. It might be that poor people could not afford to call in a doctor from a great distance, and that this arrangement would enable them to consult him at a smaller fee on fixed days. It was felt, however, that such a contingency was remote, and that there were other means of meeting the difficulty. The members appeared to be unanimous in the opinion that it

was highly undesirable for practitioners to "chase" for business. The motion was carried.

Medical Attendance in the Federal Territory.

Dr. G. A. Buchanan (Central Southern Medical Association) moved:—

That steps be taken to suitably restrict the free medical attendance at present being provided to all the employees and their families in the Federal Territory.

Dr. Buchanan explained that he had distributed type-written copies of a statement to the members for their guidance in discussing the question of the arrangements of medical practice in the Federal Territory and in determining on a policy to be recommended to the Council. The statement had been drawn up by another practitioner, who vouched for its accuracy. The present arrangements had their origin in the appointment of a medical officer at the Military College at Duntroon. The terms of his appointment had been to look after the health of persons within the College. Later it was arranged that he should give medical attendance to workmen and others employed by the Department of Home Affairs within an area of four miles of the College. The number was limited to 200.¹ Later the Administrator of the Federal Territory claimed that the wives and children of the men employed were to receive attendance. As the Medical Officer demurred from this proposal, a temporary arrangement was arrived at, pending the return of the Military Commandant. In the next place, the four-miles limit was abolished, and the doctor was provided with a conveyance. Then the restriction to 200 of the workmen was removed, and the Medical Officer was promised extra pay at contract practice rates for all in excess of 200.¹ The Department of Home Affairs was stated to have experienced difficulty in determining the exact number of employees to be attended, and, consequently, the doctor had to take what he could get. Later a special Medical Officer was appointed by the Department of Home Affairs. The matter was discussed by the Council of the New South Wales Branch, and, as a result of representations being made to the proper authority, it was agreed that the Medical Officer would only be required to attend employees of the Department in receipt of wages not exceeding £4 a week. This promise was disregarded, and at the present time all employees of the Department were accorded free attendance. In addition to the employees, the Government officials and others working for the Federal Government, with their wives and families, were included. It was proposed to extend the free medical attendance to all those who will be employed in the Arsenal which was to be established in the Territory. No doubt if this were done, those employed in the various factories would be entitled to the same privilege. The writer of the statement prophesied that medical practice within the Federal Capital Territory would be exclusively in the hands of a staff of medical civil servants. He ventured to suggest that no one would be allowed to put up a tent or house without the permission of the authorities. This would mean that there would be complete nationalization of the medical profession in the Territory.

Dr. Buchanan regarded the position as a very serious one, and endorsed the opinions expressed by his colleague who had supplied him with the information.

Dr. F. P. Sandes seconded the motion, and thanked Dr. Buchanan and his friend for having brought the matter to the notice of the meeting. The Council had been aware of the encroachment which had been going on, but it was not realized how far it had gone. He thought that energetic steps should be taken to check this procedure. He feared that it might be difficult to take strong action, as all the efforts of the New South Wales Branch would become nugatory if members of other Branches were allowed to accept positions. A united action was necessary. He thought that the wisest course would be to discuss the situation with the Director of Quarantine, and, through him, to register a strong protest to the Federal Government.

Dr. Harold J. Ritchie thought that the position was somewhat analogous to that created by the Minister of Public Health, who had recently determined that Government employees should be treated gratuitously in public hospitals.

¹ It appears that there is some error in regard to the number of 200. According to an earlier document of the author of the statement, the number was 300.—Ed.

Dr. R. H. Todd gave an account of the negotiations in regard to this matter. He had not, he explained, any brief for the other side, but it was necessary, before taking up a definite attitude in a matter of importance, to ascertain the arguments which have influenced those in control in introducing a policy. The appointment of the Medical Officer at Duntroon was quite distinct from the appointment of the medical officer by the Department of Home Affairs in the Federal Territory. The arrangement with the latter officer was that he should attend Government employees in receipt of wages not exceeding £208 per annum. It was not quite correct to state that the officer was required to attend the Administrator. The Federal authority had recognized the necessity of providing medical care for its employees, who were some considerable distance from the residence of a medical practitioner. The promise had been obtained from the authority by the Council that the Medical Officer would only be required to attend those employees who were paid £208 a year or less. The Administrator had taken the view that he could not well pay the officer of the Department private fees, and the Medical Officer had done a foolish thing. He had voluntarily waived the point, and agreed to attend the Administrator and his family without extra remuneration. The Medical Officer should have insisted on the Administrator obtaining his medical attendance from Yass or Queanbean. It was quite obvious that, as long as a considerable number of workmen were engaged in the Territory and no residential population tempted medical practitioners to settle in Canberra, the Government was bound to provide doctors for their employees. He was not aware that the system had extended to areas outside the Federal Territory; but if this proved to be a fact, a stop should be put on it. Dr. Todd stated that he had taken endless pains to obtain equitable treatment for the first Medical Officer, and that he had been placed in a difficult position by the action of the Medical Officer himself. He favoured a conference with the Director of Quarantine, who, he felt sure, would take a sympathetic view, and endeavour to find a satisfactory solution of the difficulty, as far as his official position permitted him to act.

Dr. E. A. R. Bligh expressed his indebtedness to Dr. Buchanan for having introduced the matter, and to Dr. Todd for having described the situation. He was of opinion that the Council should be able to devise some scheme, possibly on the lines of the Common Form of Agreement, which would be suitable for the conditions obtaining within the Federal Territory. The suggestion that the open panel might be given a trial was also made.

The motion was carried without dissent.

Intra-Professional Restriction.

Dr. A. Maitland Gledhen (City Medical Association) moved:—

That it be a recommendation that the rule of the Branch: "Intra-professional Restriction," be amended so that the Council may be empowered to remove disabilities conditional upon—

- (1) The payment by instalments or otherwise, by the applicant to the Honorary Treasurer, by way of fine, of a sum of money, such sum of money to be applied by the Council in such a way as it may determine, provided that it shall not be applied for the immediate benefit of the British Medical Association or for any member thereof; and
- (2) The applicant undertaking, either by means of a bond or otherwise, as the Council may require, not to practice for a period, not exceeding ten years, within a distance to be fixed by the Council, not exceeding fifty miles from any place from which, in the opinion of the Council, it would be reasonable to exclude him.

In seconding the motion, Dr. E. A. R. Bligh (Northern Suburbs Medical Association) stated that the conditions of re-entry into the Branch as they stood at present were practically prohibitive. The offending practitioner was placed so to speak on a desert island for five years. He was not allowed to consult with or meet ineligible practitioners, and the ban was not removed until the termination of the period, so that he could not meet members of the Branch.

He held that it was not always the best method of facing the difficulty. A suggestion had therefore been made to give the Council power to adopt an alternative procedure. The conditions of re-entry proposed were of the nature of a penalty. There was the payment of a fine. This in his opinion was not very satisfactory, for in some cases it might act prohibitively, while in others it was scarcely a punishment. The more practical penalty was to prevent the practitioner from practising in that area where he had accepted appointments which were regarded as inimical to the interests of the profession. Since the practitioner had erred in a particular district, it was reasonable to require him to find fresh fields where he could practise his profession in the manner prescribed by the British Medical Association. Any man who had a claim to be admitted into the Branch could easily make a living in a new district.

Dr. L. W. Roberts (Western Medical Association) referred to specific cases in which this penalty would have been satisfactory to all concerned. He considered that the Council would be the best judges as to how long the man should be excluded for his old district.

Dr. R. H. Todd explained that at present the Council had a very limited discretion. Save in very exceptional circumstances, the Council was not empowered to waive the five years' exclusion. In some cases a practitioner might desire to get rid of his appointments and to come into the fold, but he could not afford to do so. He was strongly in favour of some elasticity being given.

The motion was carried.

Constitution of the Council.

Dr. E. A. R. Bligh moved for Dr. E. C. Hall (Central Western Medical Association):—

That it be a recommendation that the Articles of Association be altered to provide that not more than 25% of the total number of members of the Council be medical practitioners practising in Macquarie Street, Sydney.

Dr. Bligh did not support the motion with argument. The motion was not seconded.

The late Mr. Thomas Kemp.

Dr. F. P. Sandes asked the members to allow him to propose that the sympathy of the members be extended to the family of the late Mr. Thomas Kemp, the Grand Secretary of the Manchester Unity of the Independent Order of Oddfellows. All who had known him honoured him and appreciated his singleness of purpose and valuable services. He therefore moved:—

That the Annual Meeting of the Council of the New South Wales Branch of the British Medical Association with the Delegates of the Local Associations of Members desires to place on record its sympathy with the family of the late Thomas Kemp in their bereavement, and to express to the M.U.I.O.O.F. its appreciation of his services to the community as Grand Secretary of the Order.

The motion was seconded by Dr. T. W. Lipscomb and supported in eulogistic terms by Dr. R. H. Todd and Dr. Sinclair Gillies. It was carried unanimously.

Medical Societies.

(Affiliated with the British Medical Association.)

WESTERN MEDICAL ASSOCIATION.

The Annual General Meeting of the Western Medical Association of New South Wales was held at Bathurst on September 27, 1916, Dr. R. T. Michell, the President, in the chair.

The annual report was read and adopted. The membership of the Association was stated to be 48. Nine of the members were absent on military service. In the financial statement the Treasurer reported that the Association had a credit balance of £8 16s.

Sympathetic reference was made to the loss that the Association had sustained by the death of Dr. Oswin Johnson, who had held the office of Vice-President. The Committee recorded with pride that military distinction had been conferred on two members of the Association, Surgeon-General N. R. Howse, V.C., and Captain Hugh Rayson.

The following were elected office-bearers and members of the Committee for the year 1916-17:—

President: Dr. P. L. Broadbent, Forbes.

Vice-President: Dr. R. S. Candlish, Cowra.

Honorary Secretary and Treasurer: Dr. L. W. Roberts, Orange.

Honorary Auditor: Dr. S. J. Woolnough, Blayney.

Members of Committee: Dr. H. Busby, Dr. W. Dalish, Dr. J.

E. Foley, Dr. C. B. Howse, Dr. T. A. Machattie, Dr.

H. McClelland, Dr. R. T. Michell, Dr. G. W. Mason,

Dr. H. Peet, Dr. H. F. Sadler, Dr. J. H. Wilson, and

Dr. Douglas Wood.

Dr. Broadbent, on taking his seat as President, read a paper on anti-typhoid inoculation at Forbes. A discussion followed.

Dr. L. Herschel Harris gave a lantern demonstration of pictures taken at Anzac, in Lemnos and in France.

Public Health.

THE HEALTH OF NEW SOUTH WALES.

The following notifications have been received by the Department of Public Health, New South Wales, during the week ending October 7, 1916:—

	Metropolitan District.		Hunter River District.		Rest of State.		Total.	
	Cs.	Dths.	Cs.	Dths.	Cs.	Dths.	Cs.	Dths.
Enteric Fever ..	5	0	0	0	5	2	10	2
Scarlatina ..	21	0	5	0	39	2	65	2
Diphtheria ..	25	1	6	0	32	3	63	4
C'bro-Sp'l Menin.	4	2	0	0	3	2	7	4
Pul. Tuberculosis	20	10	0	1	†	..	20	11

† Notifiable only in the Metropolitan and Hunter River Districts.

THE HEALTH OF VICTORIA.

The following notifications have been received by the Department of Public Health, Victoria, during the week ending October 8, 1916:—

	Metropolitan.		Rest of State.		Total.	
	Cs.	Dths.	Cs.	Dths.	Cs.	Dths.
Diphtheria ..	50	3	39	3	89	6
Scarlatina ..	30	0	19	0	49	0
Enteric Fever..	0	0	2	0	2	0
Pulmonary Tuberculosis	23	5	14	12	37	17
C'bro-Spinal Meningitis	9	..	4	..	13	..
Anterior Poliomyelitis..	1	..	0	..	1	..

INFECTIVE DISEASES IN WESTERN AUSTRALIA.

The following notifications have been received by the Department of Public Health, Western Australia, for the week ending September 30, 1916:—

	Metropolitan.		Rest of State.		Totals.	
	Cases.	Cases.	Cases.	Cases.	Cases.	Cases.
Enteric Fever..	3	..	0	..	3	..
Diphtheria ..	4	..	4	..	8	..
Scarlatina ..	0	..	3	..	3	..
Pulmonary Tuberculosis	0	..	3	..	3	..
Cerebro-Spinal Meningitis	1	..	0	..	1	..

THE HEALTH OF TASMANIA.

The following notifications have been received by the Department of Public Health, Tasmania, during the week ending October 8, 1916:—

Disease.	Hobart.		Launceston.		Country.		Whole State.	
	Cases.	Cases.	Cases.	Cases.	Cases.	Cases.	Cases.	Cases.
Diphtheria ..	4	..	0	..	12	..	16	..
Pulmonary Tuberculosis	6	..	1	..	3	..	10	..
C'bro-Spinal Meningitis	1	..	0	..	2	..	3	..
Scarlatina ..	0	..	1	..	0	..	1	..

THE HEALTH OF SOUTH AUSTRALIA.

The following notifications have been received by the Central Board of Health, South Australia, during the week ending September 30, 1916:—

	Adelaide.		Rest of State.		Totals.	
	Cs.	Dths.	Cs.	Dths.	Cs.	Dths.
Morbili ..	10	0	171	0	181	0
Pertussis ..	7	1	59	1	66	2
Diphtheria ..	2	0	22	1	24	1
Pulmonary Tuberculosis	2	3	6	3	8	6
Scarlatina ..	0	0	5	0	5	0
C'bro-Spinal Meningitis	4	0	2	0	6	0
Enteric Fever..	1	0	0	1	1	1
Erysipelas ..	0	0	1	0	1	0

INFECTIVE DISEASES IN QUEENSLAND.

The following notifications have been received by the Department of Public Health, Queensland, during the week ending October 7, 1916:—

Disease.	No. of Cases.
Erysipelas ..	4
Varicella ..	15
Pulmonary Tuberculosis	13
Cerebro-Spinal Meningitis	1
Diphtheria ..	21
Scarlatina ..	5
Enteric Fever..	5
Ankylostomiasis ..	2
Malaria ..	1

Hospitals.

ALFRED HOSPITAL, MELBOURNE.

In the 26th Annual Report of the Managers of the Alfred Hospital for the year ending June 30, 1916, it is stated that 2,651 patients were admitted into the Hospital during the year, and that there were 150 in the hospital on June 30, 1915, and 178 on June 30, 1916. It thus appears that 2,623 persons completed their course of treatment or died. Of the 2,225 persons who were discharged 2,043 were cured or relieved. The number of deaths was 398. The mortality rate was therefore 15.17. From a comparative statement it appears that the number of in-patients has increased by about one-third in 10 years. In 1906-7 the mortality was approximately 11, and in 1914-15 it was 10.5. The increased death-rate appears to have been due to the fact that a large ward was erected within the grounds of the Hospital for the accommodation of persons suffering from epidemic cerebro-spinal meningitis, and that in the wards set aside for this disease no less than 168 persons died. The mortality among the patients after excluding those affected with this disease was approximately 9%. The total number of patients admitted on account of cerebro-spinal meningitis was 237. The mortality from this disease worked out at 46.9%.

There were during the year 6,162 out-patients who received treatment in the various departments, and 2,741 persons who were dealt with in the casualty department. These numbers are somewhat smaller than the corresponding numbers in the year 1914-15, a fact which is attributed by the Managers to the scare caused by the admission of meningitis patients. The number who attended the night clinics was 369, and the dental clinic 125.

The Managers were approached by the Federal and State Governments with the request that suitable accommodation should be provided in the Hospital for adult males suffering from epidemic cerebro-spinal meningitis. The whole of the Western Pavilion was therefore given up for this purpose. The Defence Department erected additional wards, with accommodation for 150 military patients. Up to June 30, 1916, 163 civilians and 195 soldiers were admitted into the wards set aside for this purpose. The Managers plead for an enlargement of the hospital laboratory, and an extension of its equipment in order that the

bacteriological work necessitated by the presence of an epidemic of a disease like cerebro-spinal meningitis, may be coped with. Mr. David E. Lewis, of Prahran, has generously contributed £100 for this purpose, and the Prahran City Council has promised to subsidize this work.

A short statement issued by the Medical Superintendent on the work conducted in the X-ray and Radium Department, and a second statement issued by Dr. W. J. Denehy on the pathological work reveal great activity in both departments. The statistical statements include a record of the number of patients treated for the various diseases and of the number of deaths from each disease as well as a summary of the principal operations performed. As we have pointed out before in these columns, these records scarcely lend themselves to analytical review, save in the case of the more acute conditions.

The work in the Nurses' Training School has continued to give satisfaction. During the year 14 nurses obtained the certificate of the Royal Victorian Trained Nurses' Association, and two of them gained honourable mention among the competitors for the Madge Kelly Memorial prize.

The honorary medical staff have worked under increasing difficulties, it having been found impossible to fill some of the vacancies created by members having taken on active military duty. The Managers express their indebtedness to those who have conducted the work during the year.

From the financial statement it appears that the income from all sources amounted to £20,248. The Government grant amounted to £4,300, and was increased by £562 in respect of civilian patients suffering from cerebro-spinal meningitis. The municipalities contributed £570, and the Defence Department £3,591 for naval and military patients. The State and Federal Governments and the municipalities therefore provided £9,023, or 45% of the total income. Private contributions, donations and bequests, together with hospital and other collections yielded £5,589. A further sum of £4,117 was paid by or on account of patients. The contributions, therefore, of the public amounted to approximately 50% of the income. The expenditure for the year on maintenance and administration amounted to £19,035. The cost per bed works out at £97 14s 3d, and the cost per patient at £6 2s 2d. The maintenance charges have increased very considerably owing to the augmentation of prices of foodstuffs, drugs and other commodities. The salaries of the Resident Medical Officers have also increased. Prior to July, 1915, the six Resident Medical Officers received an aggregate of £400. In the year under review the same number of officers received £950. The Managers have reason to congratulate themselves on the fact that they have begun the present financial year with a balance of £1,213. They recognize, however, that the future may bring unpleasant surprises, and therefore appeal for continued support from the charitable public.

Naval and Military.

It is with deep regret that we have to record the death of Lieutenant-Colonel H. K. Bean. As has been noted from time to time in these columns, Colonel Bean has been seriously ill for many months. He was on his way back to Australia on the hospital ship *Kanowna*. As the vessel was nearing Port Said on September 25 he succumbed.

Widespread sympathy has been expressed with Dr. George E. Rennie, whose second eldest son was recently killed in action in France. Much sympathy has also been conveyed to Sir Alexander MacCormick, whose eldest son, Lieutenant Alexander Campbell MacCormick, was killed in action on October 10.

In the 233rd list of casualties, issued on October 12, the name of Captain F. A. Gray is among those of the wounded. In the same list it is reported that Captain K. S. Parker is ill in hospital. In the 234th list, issued on the following day, we find the names of two members of the Australian Army Medical Corps, Major H. Flecker and Major A. P. Wall, among those ill in hospital. The 235th list was issued on October 16, 1916. Among those ill in hospital are Captain S. M. O'Riordan and Captain C. W. Whiting.

The following has appeared in the *Commonwealth of Australia Gazette*, No. 137, under date of October 5, 1916:—

Department of Defence,
Melbourne, 12th October, 1916.

Ex. Mins. Nos. 841, 842.

Australian Military Forces.

Promotions.

His Excellency the Governor-General, acting with the advice of the Federal Executive Council, has been pleased to approve of the following changes, etc., in connexion with the Australian Military Forces, viz.:—
Australian Army Medical Corps—

Captain (Honorary Major) D. H. E. Lines is granted temporary rank and pay of Lieutenant-Colonel at rate prescribed by Universal Training Regulation 160, whilst holding appointment as Principal Medical Officer, 6th Military District. Dated 18th September, 1916.

Australian Army Medical Corps Reserve—

Honorary Captain R. G. Burnard to be Honorary Major (temporarily) with pay of rank of Major at rate prescribed by Universal Training Regulation 160, whilst holding appointment as Senior Medical Officer, Australian Imperial Force Camp, Mitcham, 4th Military District. Dated 14th August, 1916.

The following has appeared in the *Commonwealth of Australia Gazette*, No. 144, under date of October 12, 1916:—

Australian Imperial Force.

Appointments, etc.

His Excellency the Governor-General, acting with the advice of the Federal Executive Council, has been pleased to approve of the following appointments, etc., being made in the Australian Imperial Force, to take effect from dates stated opposite names:—
Army Medical Corps.

To be Captains—

Captain F. L. Bignell, Australian Army Medical Corps. Dated 16th September, 1916.

Captain (provisional) N. H. Fairley, Australian Army Medical Corps. Dated 5th September, 1916.

Honorary Captain A. C. Oliver, Australian Army Medical Corps Reserve. Dated 28th August, 1916.

Honorary Captain S. E. Holder, Australian Army Medical Corps Reserve. Dated 7th September, 1916.

Malcolm Alexander McIntyre Sinclair. Dated 29th July, 1916.

Richard Powell Waugh Francis. Dated 1st August, 1916.

Herbert Owen Chapman. Dated 15th August, 1916.

Vernon Carlisle Brown. Dated 19th August, 1916.

Edmund Luke Fitzgerald. Dated 28th August, 1916.

Guy Ardlaw Lawrence. Dated 29th August, 1916.

James Davis. Dated 31st August, 1916.

Gordon John Kennedy McIver. Dated 5th September, 1916.

Christopher Norman Matheson, Patrick Joseph Francis O'Shea, and Stanley Augustine McDonnell. Dated 6th September, 1916.

Charles Erick Watson, Algernon George Rowley Lilford, James Mann Henderson, and Ernest Leslie Morgan. Dated 11th September, 1916.

Philip Beauchamp Sewell and Hugh Compson Trumble. Dated 12th September, 1916.

Frank Elliot Trenoweth True and David Dorey Brown. Dated 14th September, 1916.

Percival James Campbell. Dated 15th September, 1916.

Euan Ironside Littlejohn, Arthur John DeSiz Howard, and William Henry Roberts. Dated 19th September, 1916.

To be Honorary Lieutenants—

Staff Sergeant Oscar David Ward, Australian Imperial Force. Dated 1st August, 1916. (This cancels the notification respecting the appoint-

ment of Staff Sergeant Oscar David Hall which appeared on page 1773 of *Commonwealth of Australia Gazette*, No. 100, of 10th August, 1916.)

Honorary Lieutenants C. L. Harvey, E. H. Gawley, H. T. S. Donaldson, W. S. Wilkinson, F. A. Comins, and A. E. Clarke, Australian Army Medical Corps Reserve. Dated 1st September, 1916.

Arthur John Gall. Dated 16th May, 1916.

Walter Victor Campbell, and Douglas Boyd Irwin. Dated 1st September, 1916.

Termination of Appointments.

The appointments of the unmentioned officers are terminated from dates as stated against their respective names:—

Major C. Read. 26th August, 1916.

Major H. J. Stewart. 29th August, 1916.

Major A. E. Mills. 26th August, 1916.

Major L. W. Dunlop. 15th August, 1916.

Captain H. G. Lougheran. 12th September, 1916.

Captain J. H. Macarthur. 16th September, 1916.

Captain G. W. Bray. 29th September, 1916.

Captain E. J. Savage. 23rd August, 1916.

THE LATE CAPTAIN PLANT.

The Hon. J. B. Nash writes (October 14, 1916):—

Captain Plant. Alas! One more member of the medical profession has given his life for his country, to the honour of his class and to his own glory. He was a man! Take him for all in all, a worthy member of an honourable calling, whether it be in the rôle of civilian or when clothed in military uniform. Every moment that he lived he did credit to the three stars which he carried upon each shoulder strap. It was my good fortune to have him as one of my officers at Abbassia, for four months of the year 1915, A.D., when we were serving in Egypt as members of the A.I.E. Force. He knew his business well in both professions. Loyal on all occasions to his seniors, he set a fine example to his juniors. He was admired and respected by all, from the commanding officer to the bugler, and the men who came under his care, whether sick or wounded, felt that at any moment his mental and physical abilities were at their command to be freely exercised for their relief and benefit. "Honour's thought reigned always in his breast," "modest stillness and humility" were his 'midst his works of peace, and when "the noise of battle hurried in the air" around him none were found more willing than he to answer duty's call. I feel the death of Captain H. F. H. Plant, M.B., to be a personal loss.

Correspondence.

OBSTETRIC PRACTICE.

Sir,—It is to be regretted that Dr. Hipsley, in his survey of 760 consecutive cases, did not refer to his management of the third stage of labour. He appears to have had little or no trouble in dealing with adherent placenta or retained fragments, and, consequently, a knowledge of his methods would be of advantage.

My experience in regard to multiple pregnancies has been unusual, and, in a consecutive series of 51 cases, I have attended five cases of twins and one of triplets. All the children are living, except one female child, and in one case there was a so-called papyraceous foetus of about two months. The triplets were from three ova, and two lots of the twins were uniovular, one of these being premature (eighth month). One of the premature children weighed 3½ lbs. at birth, and is still living. In regard to the use of sedatives, during the past six or seven years, I have used morphine sulphate, gr. ¼, hyoscyne hydrobromide, gr. 1/100, and atropine sulphate, gr. 1/100 in cases of functional rigidity of the cervix, and in cases of marked spasmodic rigidity it has been of advantage to administer a general anæsthetic prior to the hypodermic injection of morphine, hyoscyne and atropine. A hypodermic injection of these drugs is particularly useful in nervous and elderly

primiparæ, and it should not be used in cases where birth is expected to occur in an hour or two. My only unfortunate experience occurred in a case in which birth took place within an hour or so of the hypodermic injection of these drugs, and, although the heart of the infant was beating, I was unable to establish respiration. The drugs appear to have some action on the respiratory centre.

Suturing the perineum immediately after the birth of the child is not always of advantage, as there may be a difficulty afterwards to introduce the hand to remove the placenta. I am inclined to the opinion that digital examination of the os tends to produce rigidity of the cervix. With regard to the removal of portions of retained placenta, the curette should not be used, as it tends to break down the protective barrier of leucocytes and gives a certain amount of risk of perforation. The finger is the best curette, and there is then no doubt as to whether the portions of retained placenta are all removed.

I am surprised that the use of the intra-uterine douche was so generally advised in the treatment of septic cases, and that the maintenance of uterine contraction in septic cases by the use of a suitable medicated pack and the administration of drugs was not mentioned. There was no reference to the use of enesol as a vaginal douche in septic cases, and, although it has not been used by me for this purpose, I had hoped to hear the results of this form of treatment. I am of opinion that it might be of advantage in all cases where infection of the uterus is suspected to pack its interior with 10% iodoform gauze soaked in a solution of ichthyol and glycerine and inject a prophylactic dose of antistreptococcus serum. This precaution would be particularly applicable to cases attended by old midwives, who have been in sole charge of the case prior to the arrival of the medical man.

Yours, etc.,

R. A. PARKER.

"Cottesbrooke," Healesville, Victoria,

October 9, 1916.

MENTAL DEFICIENCY.

Sir,—The article in your journal of the 14th inst. on "Congenital Mental Deficiency," by Dr. Lind, was very interesting; but, unfortunately, the research has been carried out by the same old methods: unreliable statements and statistics. I did a good deal of work on these lines some years ago, and my associates and myself generally ended up in the same manner as Dr. Lind, "as you were." Personally, I believe the solving of these interesting problems is to be found in the realms of bio-chemistry and not in pathology (nor statistics). The latter is simply the result and not the cause. Then why worry about a known result? And, again, how many brains one may examine and pathologically find nothing and yet the fact of grave mental deficiency remains! Further, the number of cases of insanity produced suddenly, and cases of years standing cured suddenly, by some form of mental shock, and in these cases one would probably find no recognized pathological conditions, and there, unfortunately, the research stops. In these cases one finds a strong point in that these conditions of mental deficiency are due to the production of certain group changes in the atomic and molecular construction of the cell caused by the action of certain new group formations on the cell substance, and which produces at once a want of balance in the ordinary dynamic forces of the cell, due to the disintegration of the regular bio-chemical groups and the formation of new ones. These conditions may be produced in the cell substance previous to birth, through the mother or father, or by direct action on the individual after birth. There is, of course, in my opinion, always a weak link in the chain of heredity, due to inherited (or acquired) disease (syphilis-alcohol "nerve diseases," etc.), which causes a weakness in the atomic and molecular construction of the cell. In other words, these various diseases and conditions may produce a weak bio-chemical tie, and a shock (any form of increased vibration) simply breaks down these weak groups, and thus causes the formation of new internal chemical groups, and, secondly, "irregular" cell formation. This "irregularity," of course, may be visible or invisible; in the sea of invisibility we get lost, but in the visible we recognize the various "pathological" changes, and are content. The question still

unsolved! I believe it is into the invisible that we require to search, and I would not be surprised if, in the near future, cancer research is not governed by this form of thought.
Yours, etc.,

A. REGINALD McLEOD, M.D.

Sydney, October 13, 1916.

CEREBRO-SPINAL MENINGITIS.

Sir,—In your leading article of May 27, 1916, reviewing the work of Doctors Hort, Lewis and Benians on cerebro-spinal fever, you refer to these investigators as "workers at the Lister Institute." As a matter of fact, the papers by these authors were not issued from the Lister Institute, and that Institute is in no sense responsible for them.

Yours, etc.,

ARTHUR HARDEN,

Deputy Director.

The Lister Institute of Preventive Medicine,
Chelsea Gardens, Chelsea Bridge Road,
London, S.W., August 25, 1916.

Proceedings of the Australasian Medical Boards.

NEW SOUTH WALES.

The following have been registered under the provisions of "The Medical Act, 1912 and 1915," as duly qualified medical practitioners:—

Le Souëf, Arthur Wadeson, M.B., Bac. Surg., 1916, Univ. Melbourne.

For additional registration:—

Ridler, Henry Absalom, Mast. Surg., 1916, Univ., Sydney.

Medical Appointments Vacant, etc.

*For announcements of medical appointments vacant, assistants, locum tenentes sought, etc., see "Advertiser," page xxi.

Department of Defence, Trained Nurses for Service with R.A.M.C.

Royal Australian Naval Medical Service, Temporary Surgeons.

Medical Appointments.

IMPORTANT NOTICE.

Medical practitioners are requested not to apply for any appointment referred to in the following table, without having first communicated with the Honorary Secretary of the Branch named in the first column, or with the Medical Secretary of the British Medical Association, 429 Strand, London, W.C.

Branch.

APPOINTMENTS.

VICTORIA.

(Hon. Sec., Medical Society Hall, East Melbourne.)

Brunswick Medical Institute.
Bendigo Medical Institute.
Prahran United F.S. Dispensary.
Australian Prudential Association Proprietary, Limited.
National Provident Association.
Life Insurance Company of Australia, Limited.
Mutual National Provident Club.

SOUTH AUSTRALIA.

(Hon. Sec., 3 North Terrace, Adelaide.)

The F.S. Medical Assoc., Incorp., Adelaide.

QUEENSLAND.

(Hon. Sec., B.M.A. Building, Adelaide Street, Brisbane.)

Brisbane United F.S. Institute.

Branch

WESTERN AUSTRALIA.

(Hon. Sec., 230 St. George's Terrace, Perth.)

APPOINTMENTS

Swan District Medical Officer.
All Contract Practice Appointments in Western Australia.

NEW SOUTH WALES.

(Hon. Sec., 30-34 Elizabeth Street, Sydney.)

Department of Public Instruction—Appointments as Salaried Medical Officers, with duties which include the treatment of school children.

Australian Natives' Association.

Balmain United F.S. Dispensary.

Canterbury United F.S. Dispensary.

Leichhardt and Petersham Dispensary.

M.U. Oddfellows' Med. Inst., Elizabeth Street, Sydney.

Marrickville United F.S. Dispensary.

N.S.W. Ambulance Association and Transport Brigade.

North Sydney United F.S.

People's Prudential Benefit Society.

Phoenix Mutual Provident Society.

F.S. Lodges at Casino.

F.S. Lodges at Lithgow.

F.S. Lodges at Orange.

F.S. Lodges at Parramatta, Penrith, Auburn, and Lidcombe.

Newcastle Collieries — Killingworth, Seaham Nos. 1 and 2, West Wall-send.

NEW ZEALAND: WELLINGTON DIVISION.

(Hon. Sec., Wellington.)

F.S. Lodges, Wellington, N.Z.

Diary for the Month.

- Oct. 21.—Northern Suburbs Med. Assoc. (N.S.W.).
Oct. 25.—Vic. Branch, B.M.A., Council.
Oct. 26.—South Aust. Branch, B.M.A., Branch.
Oct. 27.—N.S.W. Branch, B.M.A., Branch (Ordinary).
Oct. 31.—N.S.W. Branch, B.M.A., Medical Politics Committee, Organization and Science Committee.
Nov. 1.—Vic. Branch, B.M.A., Branch.
Nov. 3.—Q. Branch, B.M.A., Branch.
Nov. 9.—Vic. Branch, B.M.A., Council.
Nov. 10.—N.S.W. Branch, B.M.A., Clinical.
Nov. 10.—S. Aust. Branch, B.M.A., Council.
Nov. 14.—N.S.W. Branch, B.M.A., Ethics Committee.
Nov. 15.—North Eastern Med. Assoc. (N.S.W.).
Nov. 15.—W. Aust. Branch, B.M.A., General.
Nov. 17.—Q. Branch, B.M.A., Council.
Nov. 21.—N.S.W. Branch, B.M.A., Executive and Finance Committee.

EDITORIAL NOTICES.

Manuscripts forwarded to the office of this Journal cannot under any circumstances be returned.

Original articles forwarded for publication are understood to be offered to *The Medical Journal of Australia* alone, unless the contrary be stated.

All communications should be addressed to "The Editor," *The Medical Journal of Australia*, B.M.A. Building, 30-34 Elizabeth Street, Sydney, New South Wales.